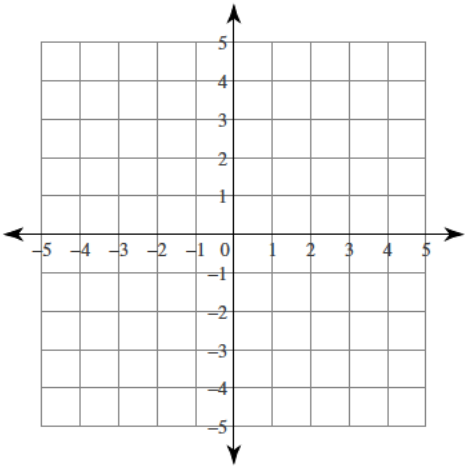
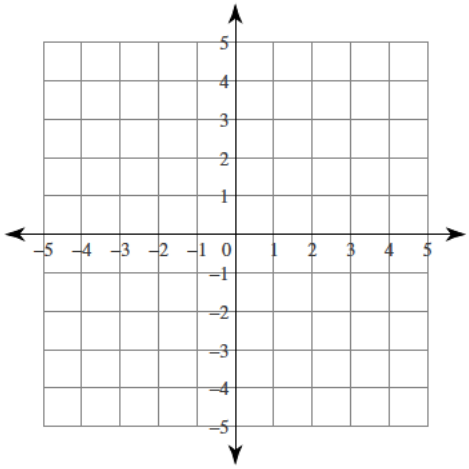
Graphing linear equations

Sketch the graph of each line.

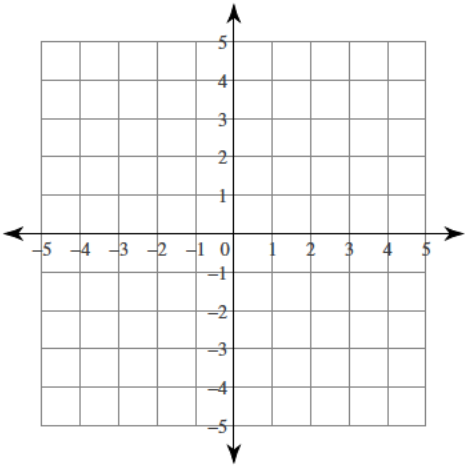
1) $4x - 3y = 3$
$4x - 3y = 6$



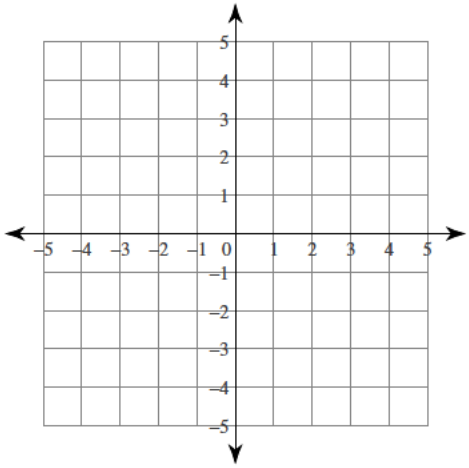
2) $x - 2y = 2$
$x - 2y = -2$



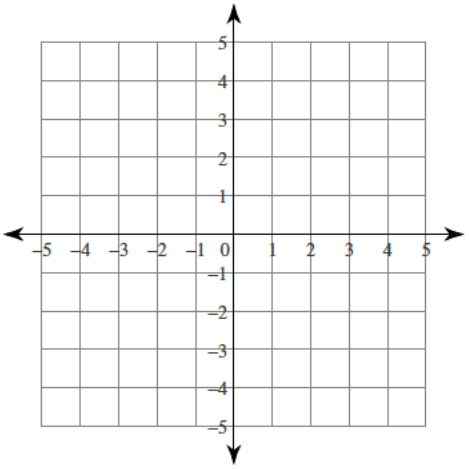
3) $4x - 3y = 9$
$2x + 3y = 9$



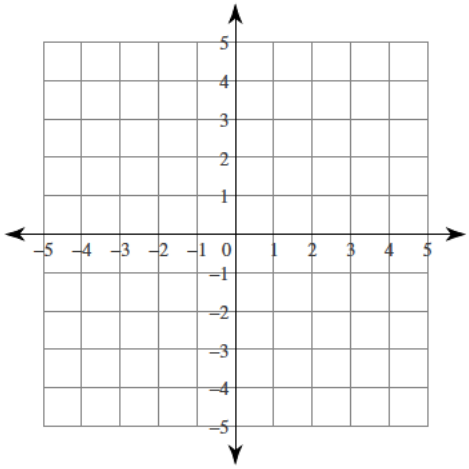
4) $5x - 2y = 2$
$x - 2y = -6$



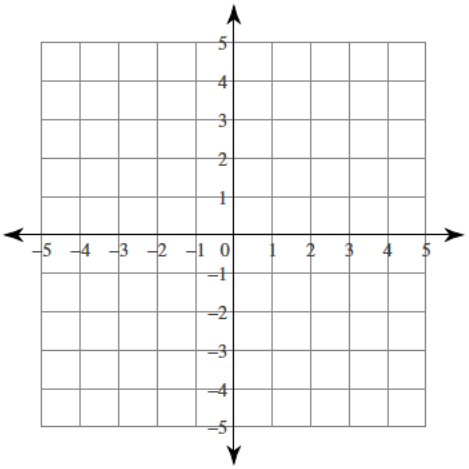
5) $x + 3y = -9$
$2x - y = -4$



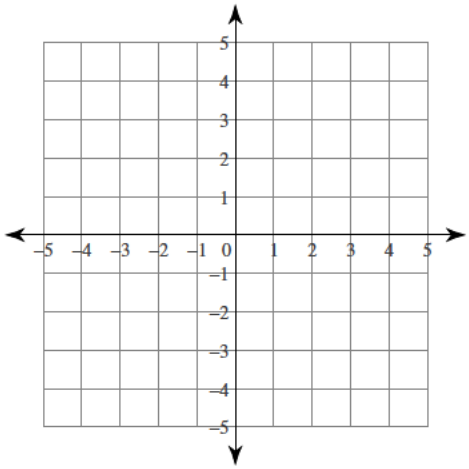
6) $x - y = -3$
$4x + y = -2$



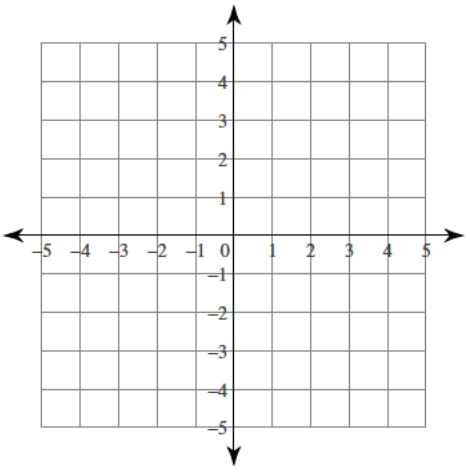
7) $4x + y = 4$
$x + 2y = -6$



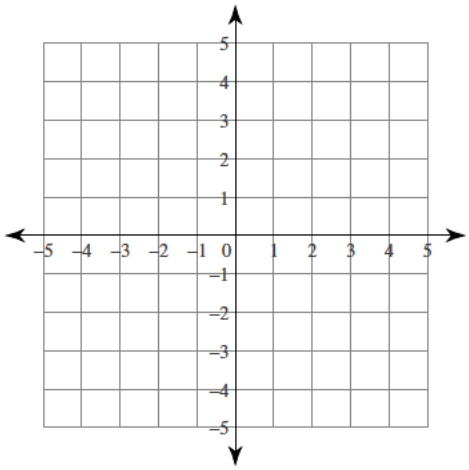
8) $3x + y = -4$
$x - 2y = -6$



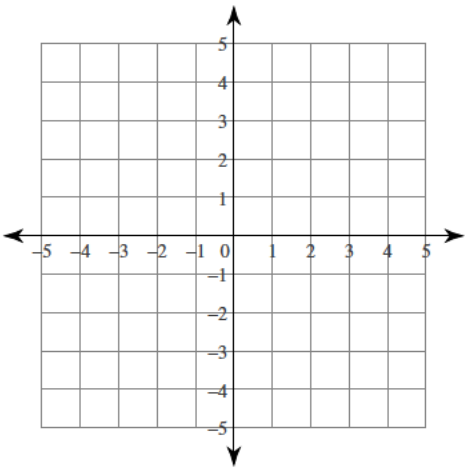
9) $5x + y = -1$
$x + y = 3$



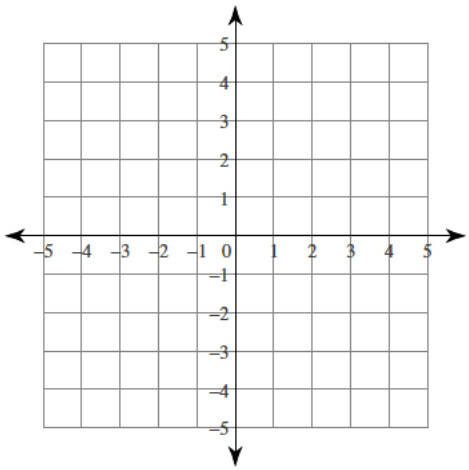
10) $x - y = 4$
$2x + y = -1$



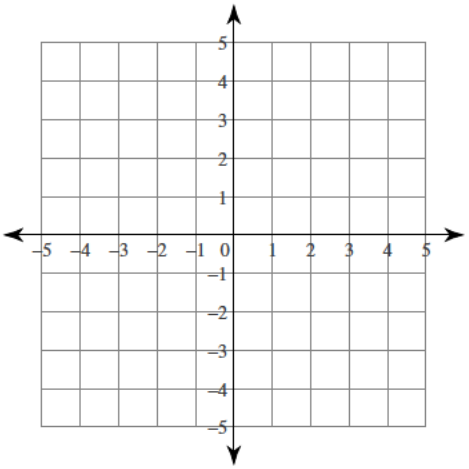
11) $x + 2y = -6$
$5x - 4y = -16$



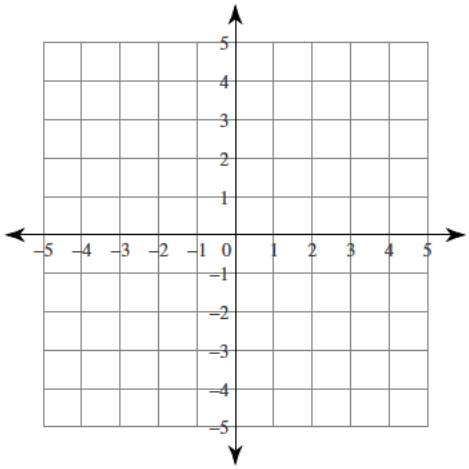
12) $x + 2y = 4$
$x + 2y = -2$



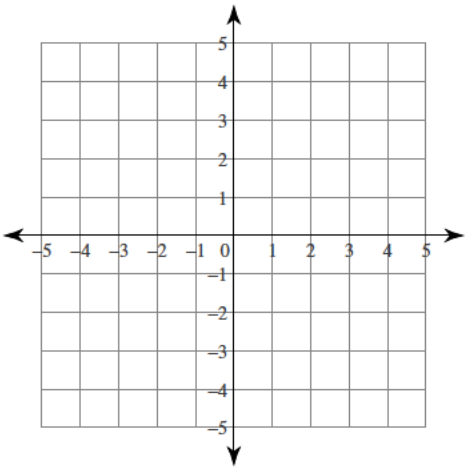
13) $y = -3$
$3x - y = -3$



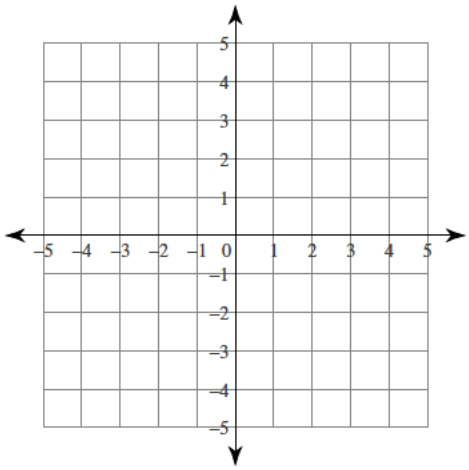
14) $x = -3$
$x + y = 1$



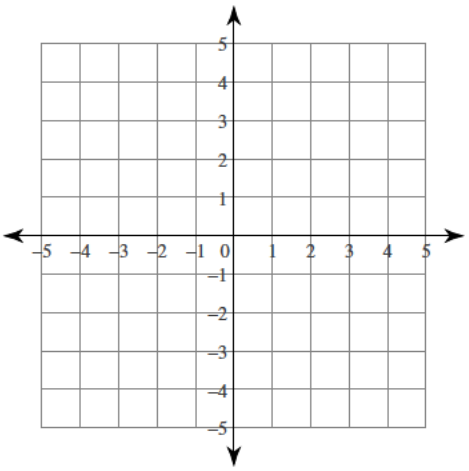
15) $2x - 3y = 3$
$x + y = 4$



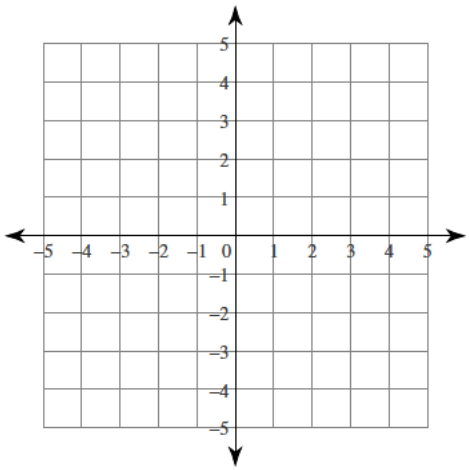
16) $5x - y = -3$
$2x + y = -4$



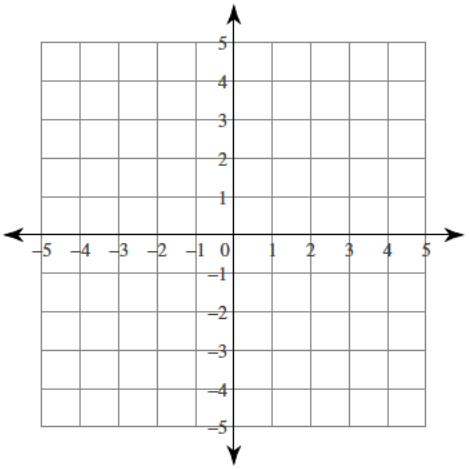
17) $2x + 3y = 12$
$x - y = 1$



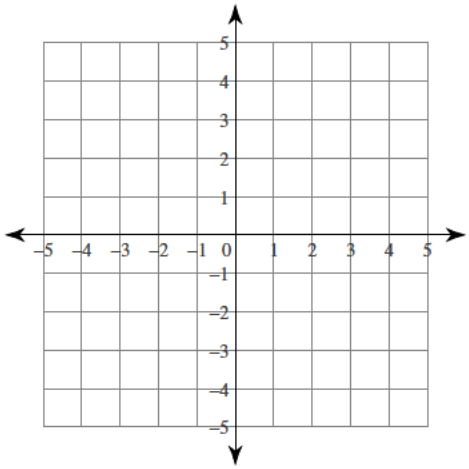
18) $7x - 4y = -12$
$x - 2y = 4$



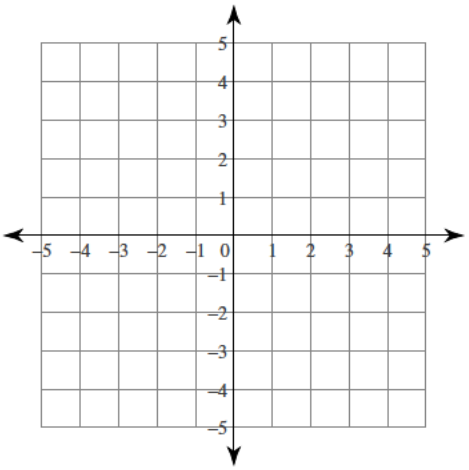
19) $x + y = -3$
$5x - 2y = -8$



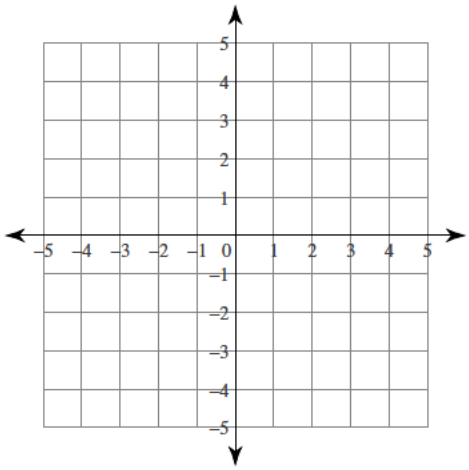
20) $x + 4y = -8$
$5x + 4y = 8$



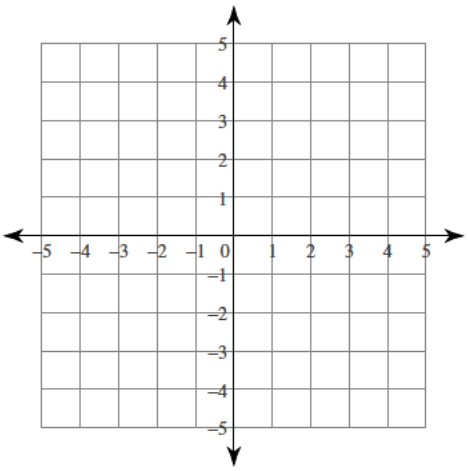
21) $x - 2y = -2$
$3x - 2y = 2$



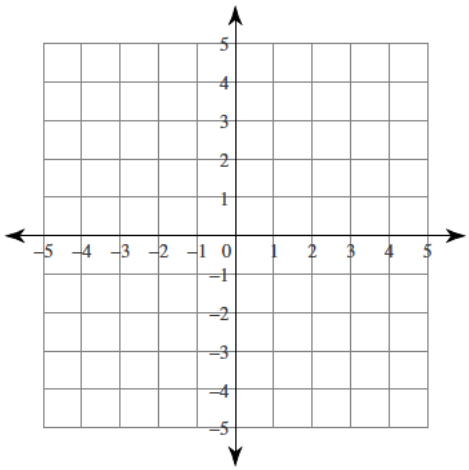
22) $5x - y = 2$
$5x - y = -4$



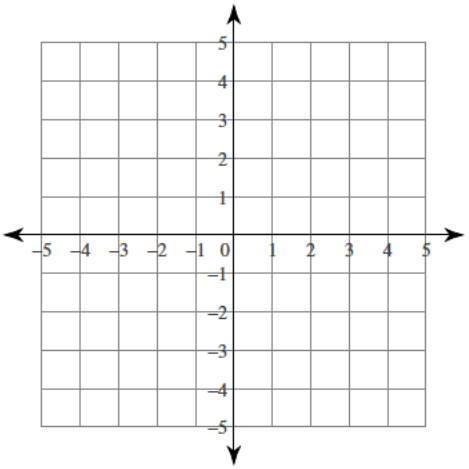
23) $3x - 2y = -8$
$x + 2y = -8$



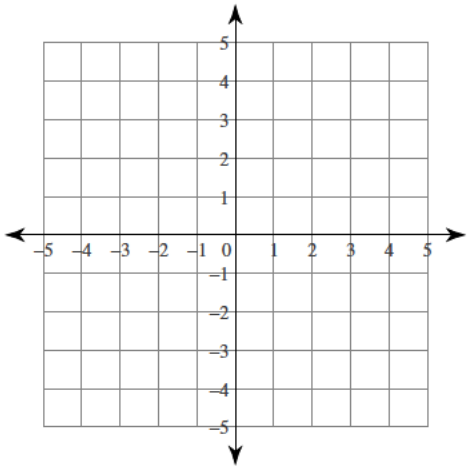
24) $3x + 2y = 6$
$3x + 2y = -4$



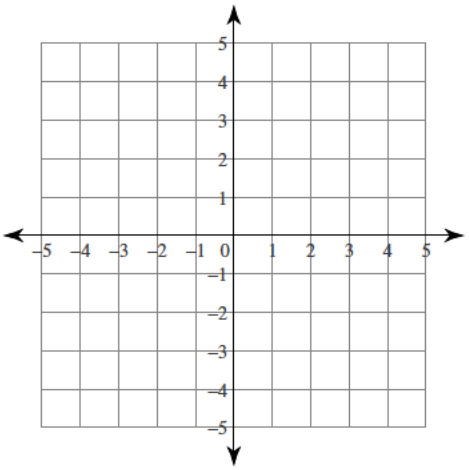
25) $x - y = -4$
$2x + 3y = -3$



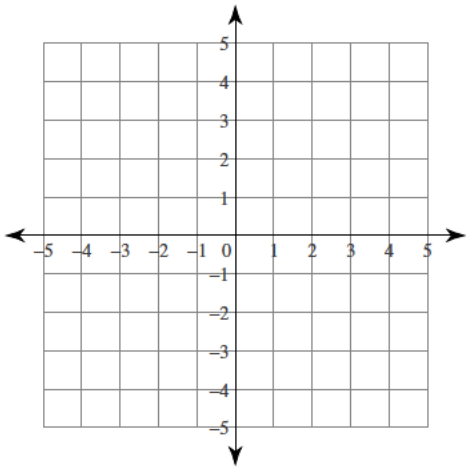
26) $7x - 3y = 9$
$2x - 3y = -6$



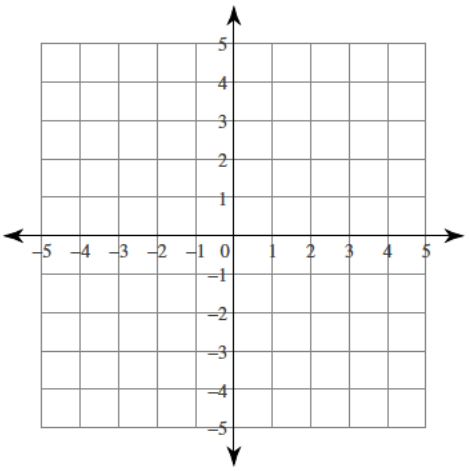
27) $2x - 3y = 12$
$2x + y = 4$



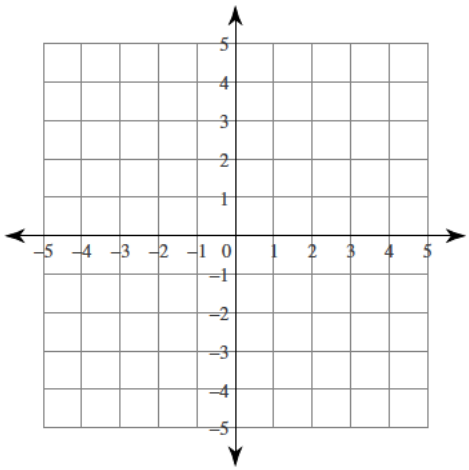
28) $x + 2y = -6$
$4x + y = 4$



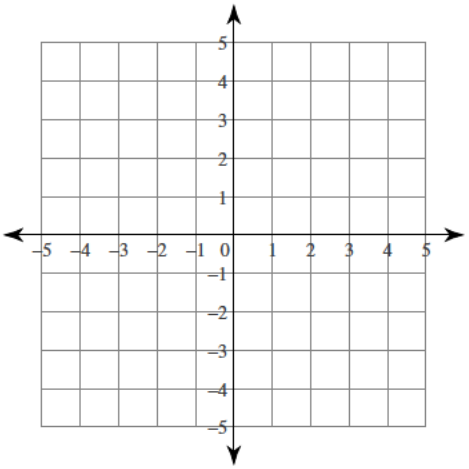
29) $x = -4$
$x + y = -3$



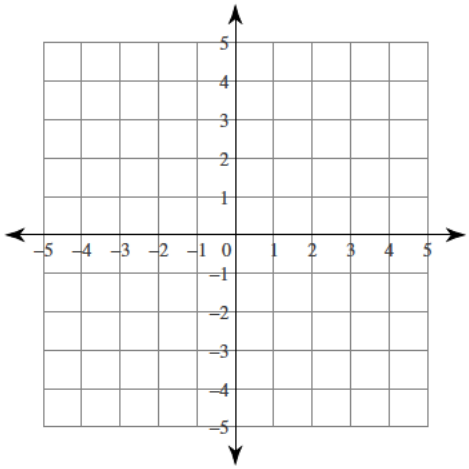
30) $x - y = 3$
$3x + 2y = 4$



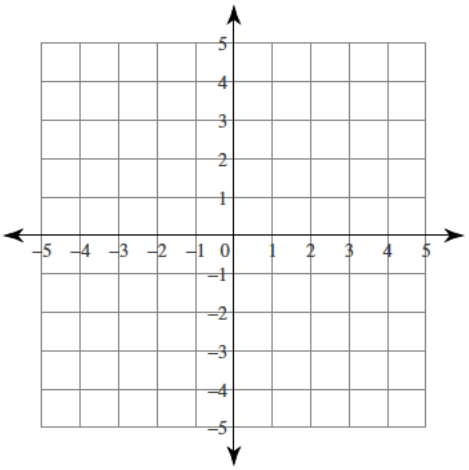
31) $x - y = 2$
$x + 4y = 12$



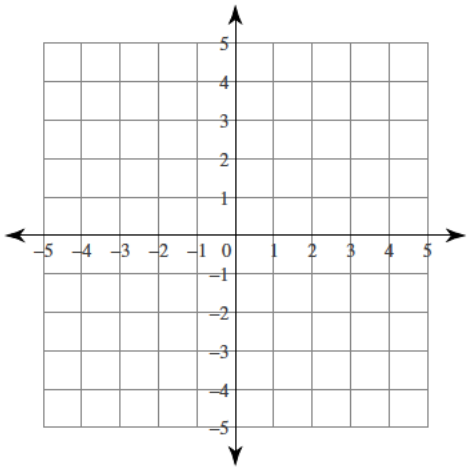
32) $x - y = 3$
$6x - y = -2$



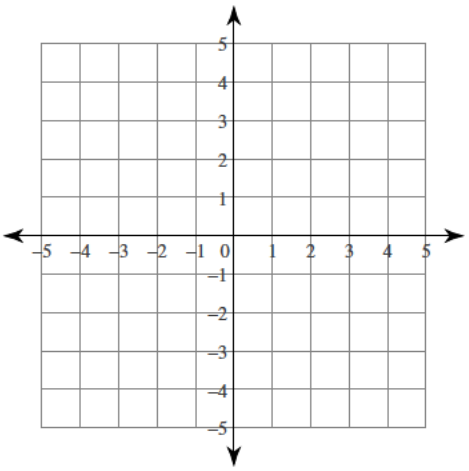
33) $x + y = 3$
$3x - 2y = 4$



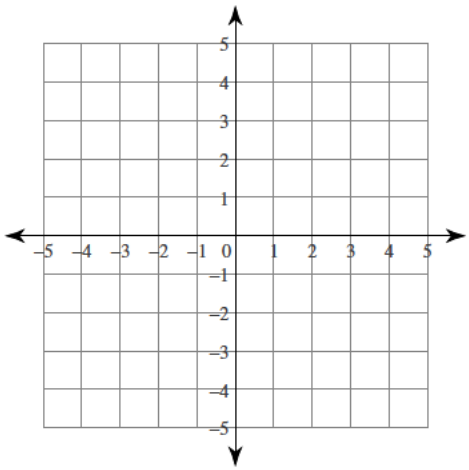
34) $x - 2y = -2$
$x - 2y = -4$



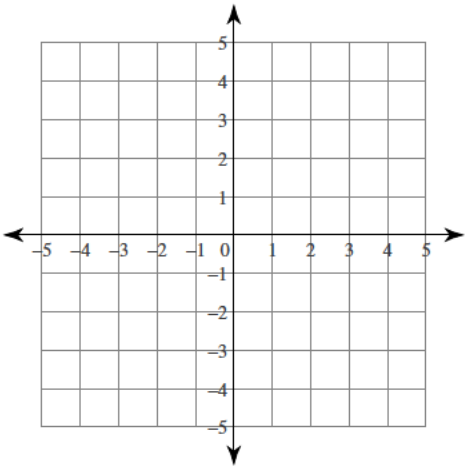
35) $5x - 2y = -4$
$5x - 2y = 8$



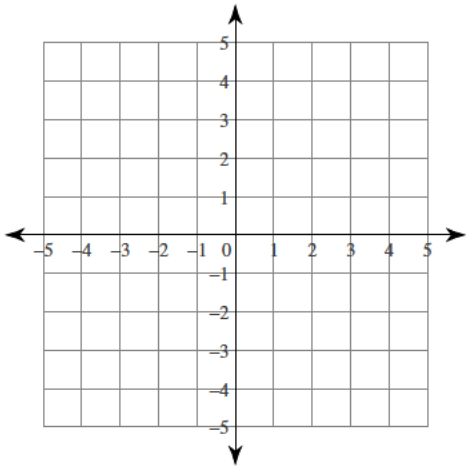
36) $x + y = 3$
$2x - y = 3$



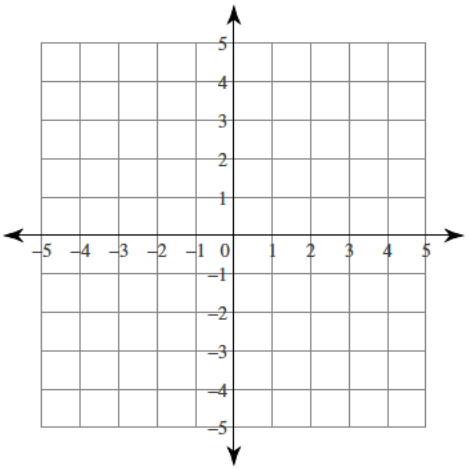
37) $x + 2y = -8$
$x = -4$



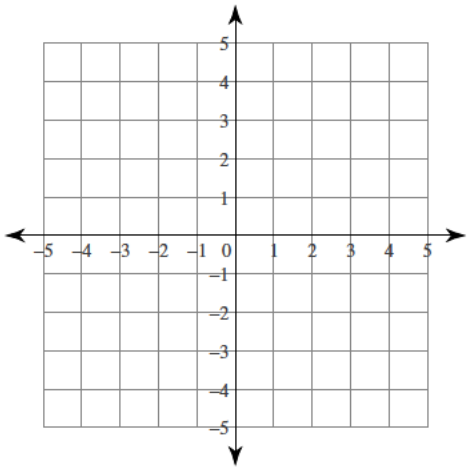
38) $x - 3y = -9$
$8x - 3y = 12$



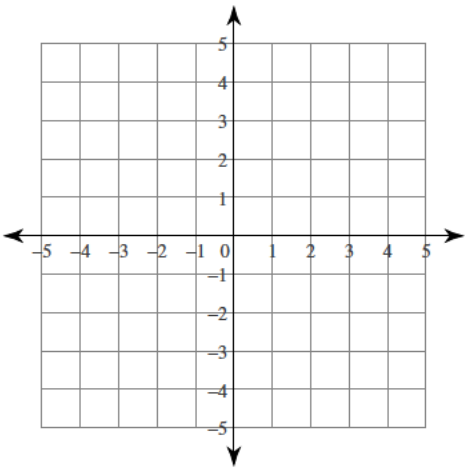
39) $x + 2y = -6$
$5x + 2y = 2$



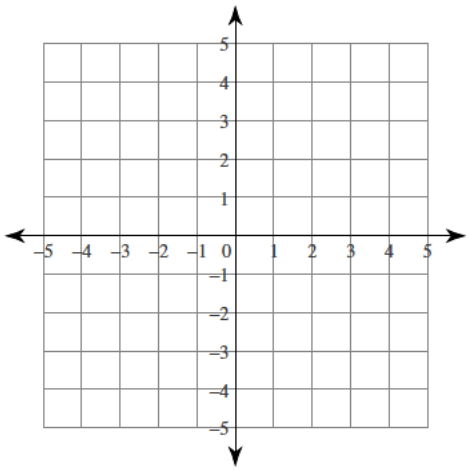
40) $x - 2y = 2$
$3x + 4y = 16$



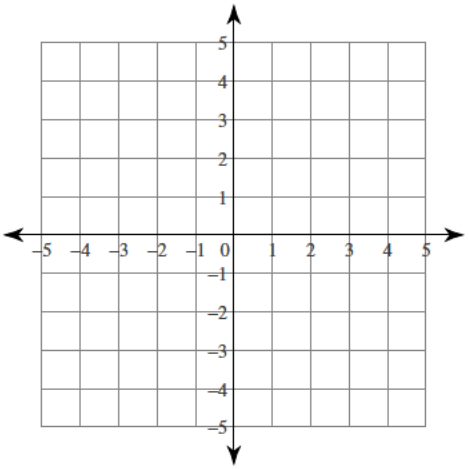
41) $x - 4y = 8$
$5x + 4y = 16$



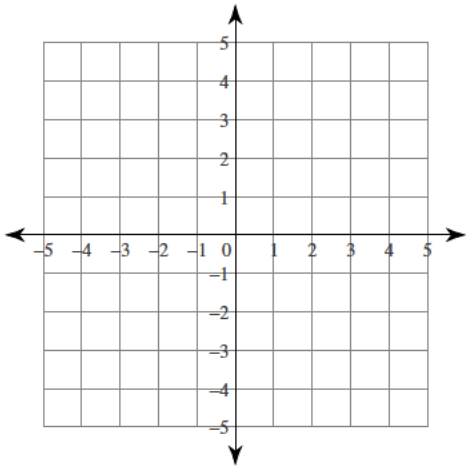
42) $x + 2y = 6$
$3x + 2y = 2$



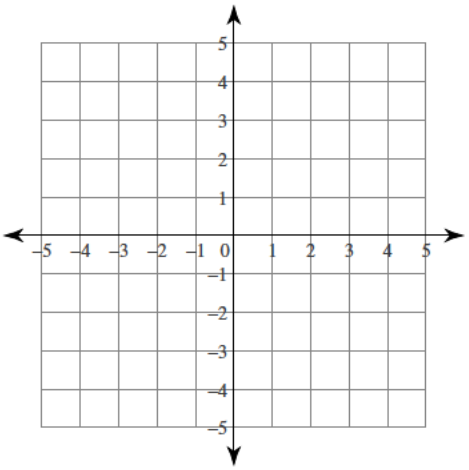
43) $6x + y = -4$
$x - y = -3$



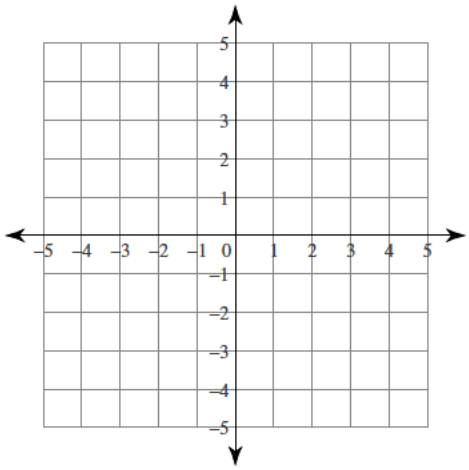
44) $x + 2y = 4$
$x + 2y = -6$



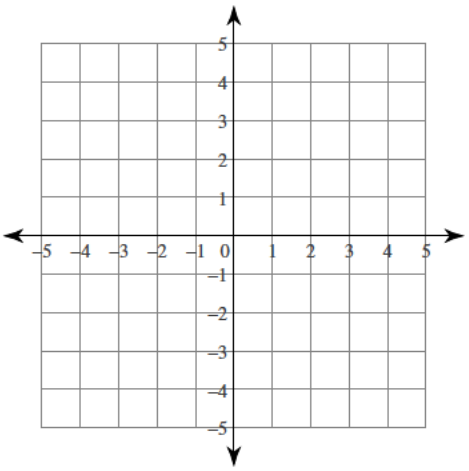
45) $2x - y = -1$
$x - 2y = 4$



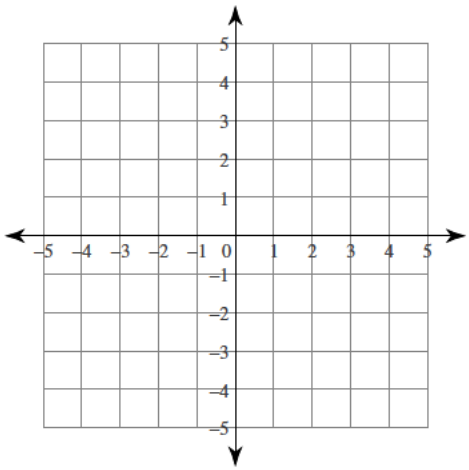
46) $x - 3y = -12$
$7x + 3y = -12$



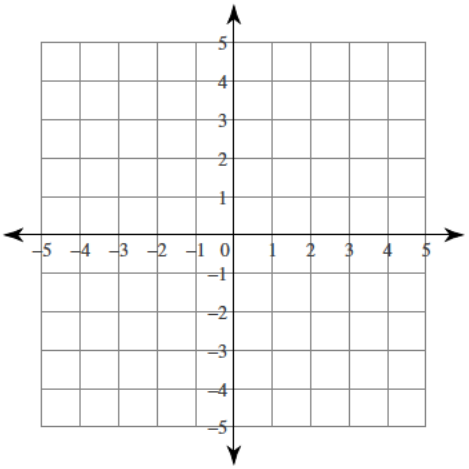
47) $2x - y = 3$
$x + y = 3$



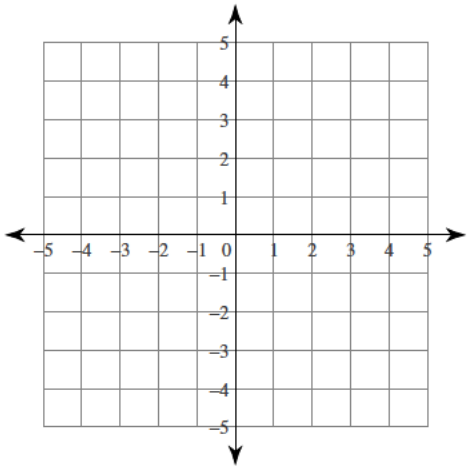
48) $x - y = -2$
$x - 4y = 4$



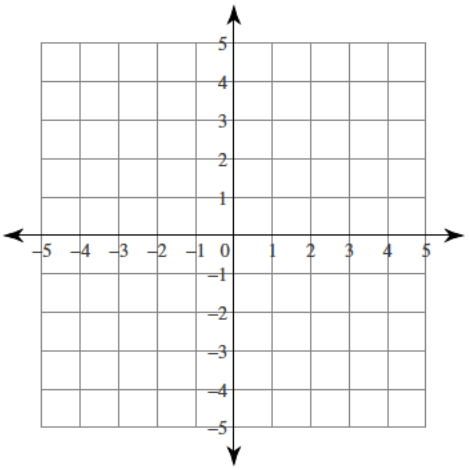
49) $8x + 3y = -12$
$x + 3y = 9$



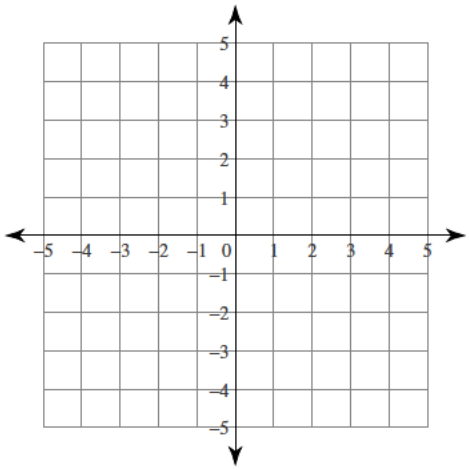
50) $2x + y = -3$
$4x - y = -3$



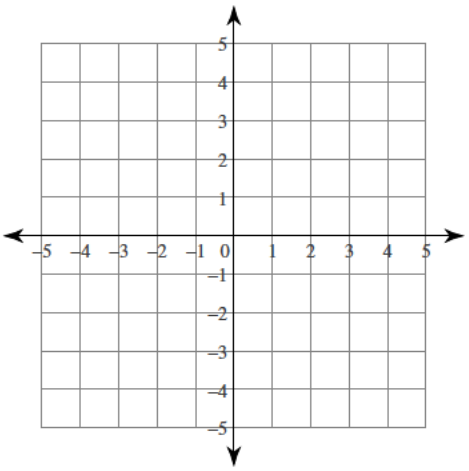
51) $6x - y = 4$
$x - y = -1$



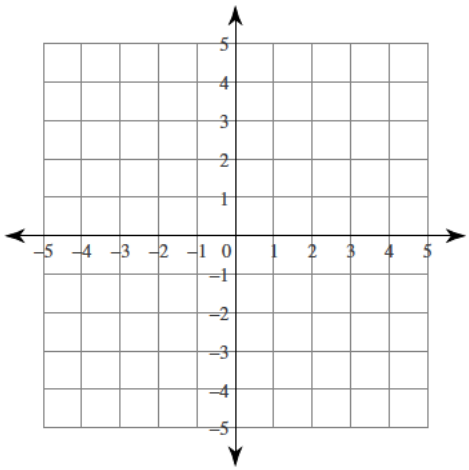
52) $2x - y = -4$
$x - 4y = 12$



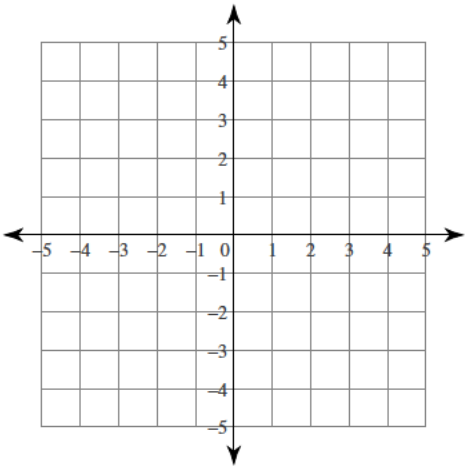
53) $5x - 4y = -4$
$x - 4y = 12$



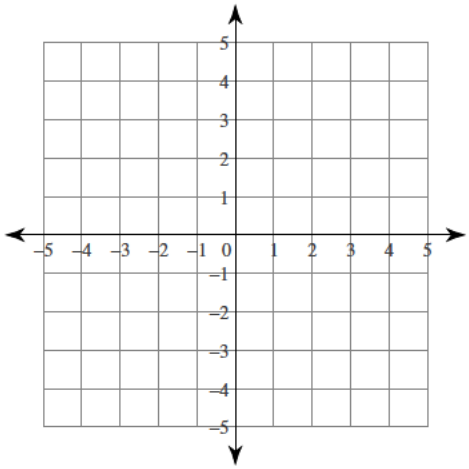
54) $x + 4y = -4$
$5x + 4y = 12$



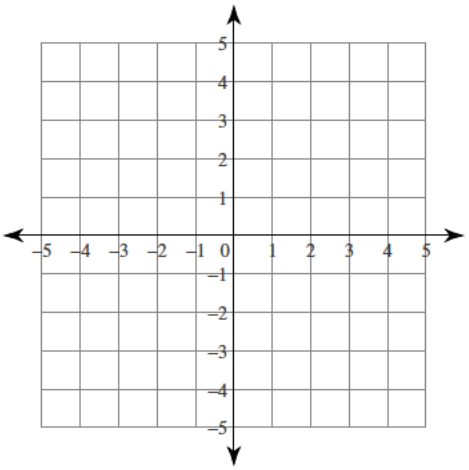
55) $x + y = 4$
$x + y = -4$



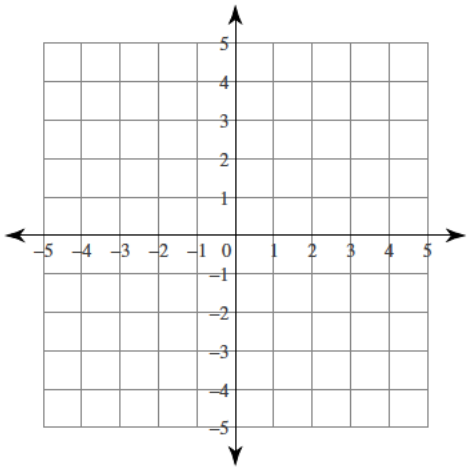
56) $7x + 4y = 16$
$x - 4y = 16$



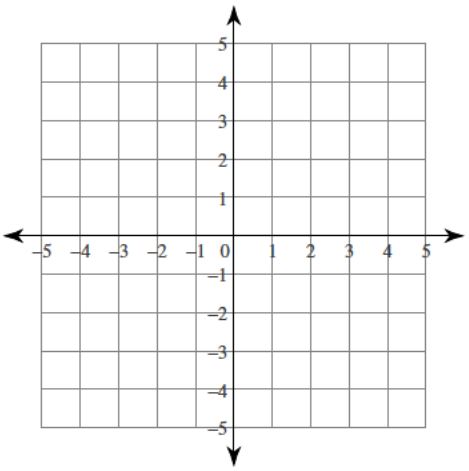
57) $x + y = -3$
$6x + y = 2$



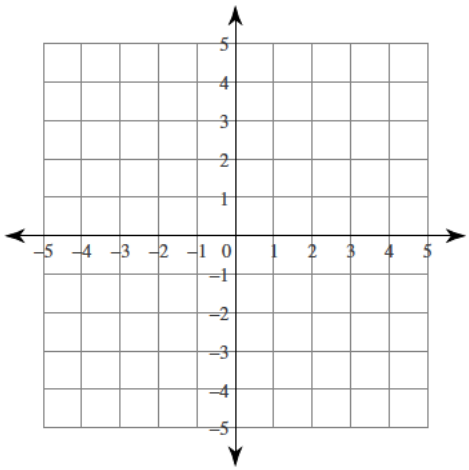
58) $x + 3y = -6$
$2x + y = 3$



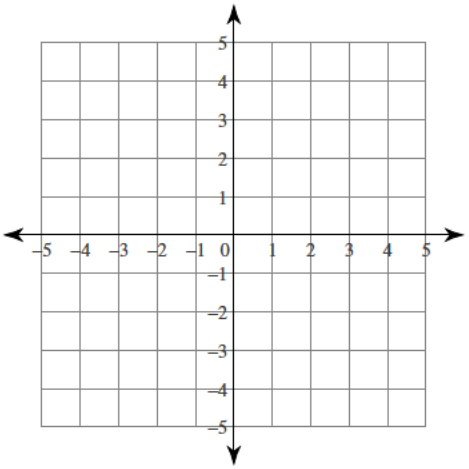
59) $x + y = 1$
$x - y = 3$



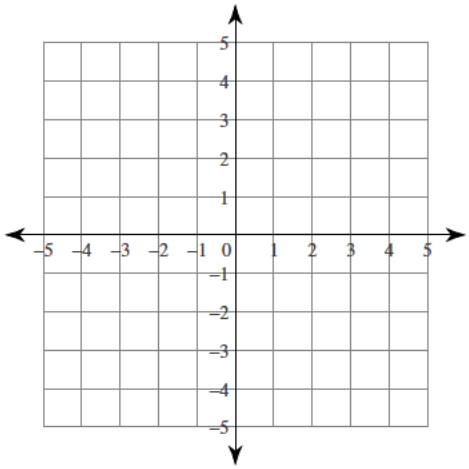
60) $6x + y = -2$
$x + y = 3$



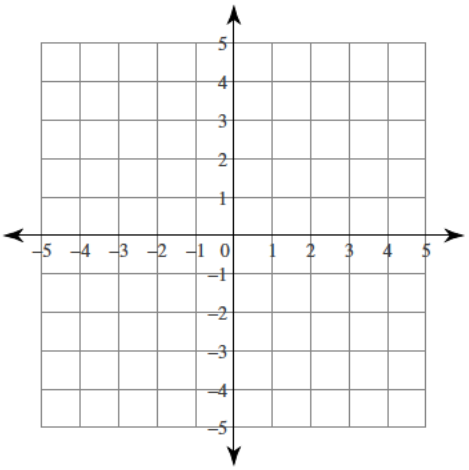
61) $x + 4y = 4$
$x + y = -2$



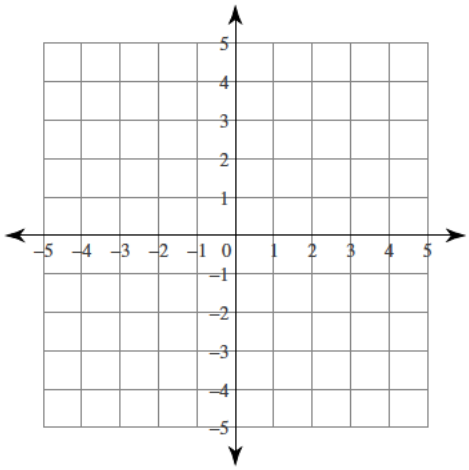
62) $x - 2y = 6$
$4x - y = -4$



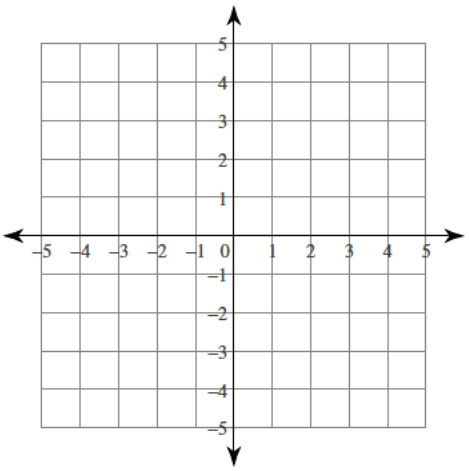
63) $x + y = 3$
$6x - y = 4$



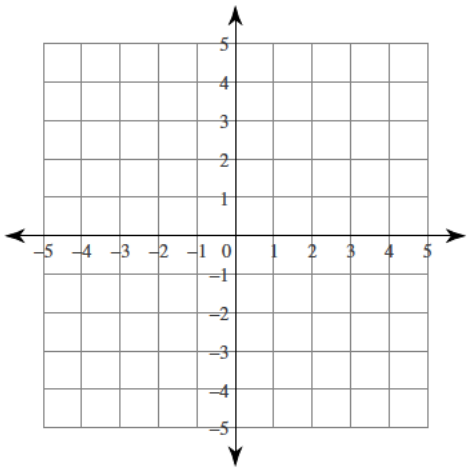
64) $x + 4y = 16$
$x + 4y = -12$



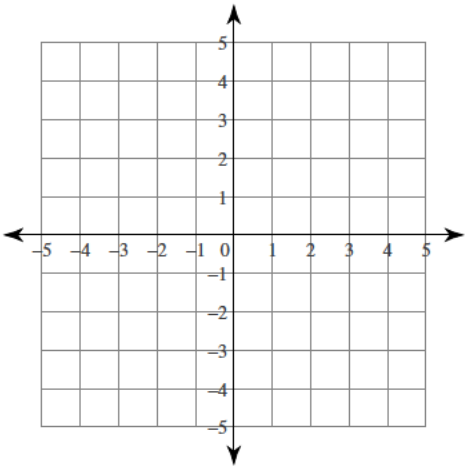
65) $x - 4y = -8$
$x - 4y = 8$



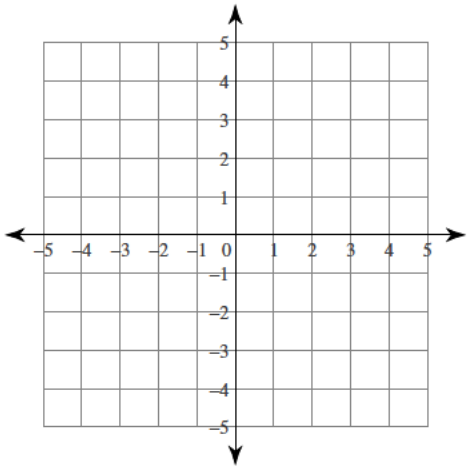
66) $x + 3y = -12$
$2x - 3y = 3$



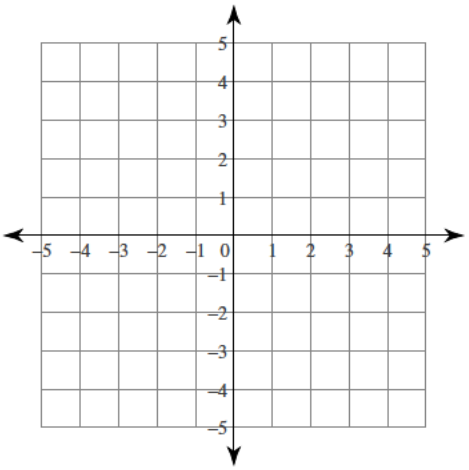
67) $2x - y = -4$
$2x + 3y = -12$



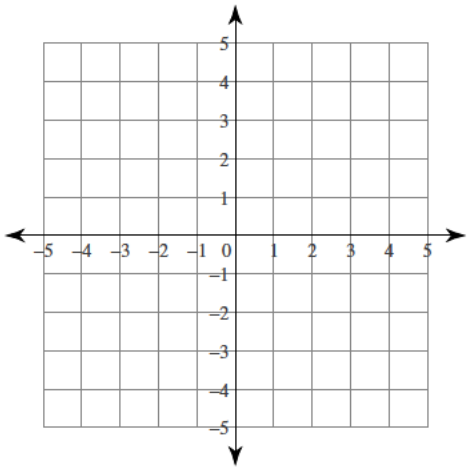
68) $8x - 3y = 12$
$2x - 3y = -6$



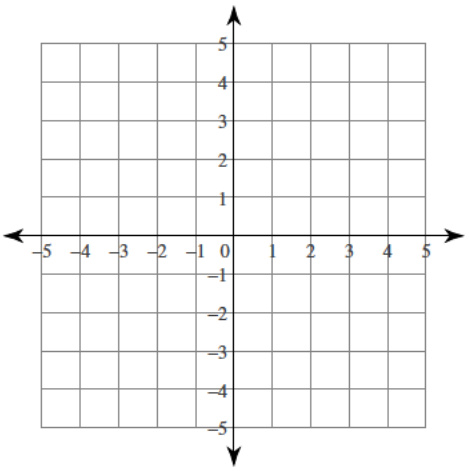
69) $2x - y = -3$
$3x + y = -2$



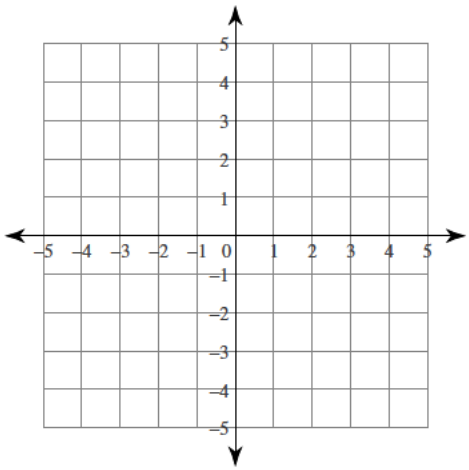
70) $4x - y = 4$
$x - 2y = -6$



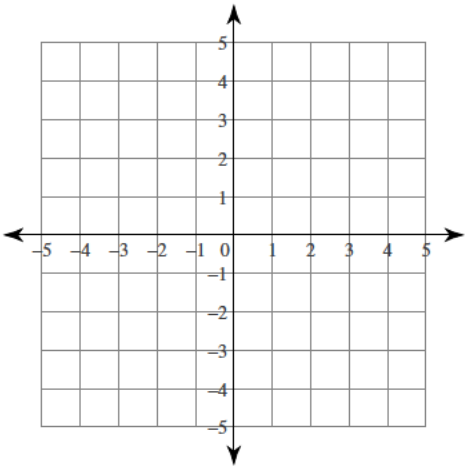
71) $x + y = 1$
$x - y = -3$



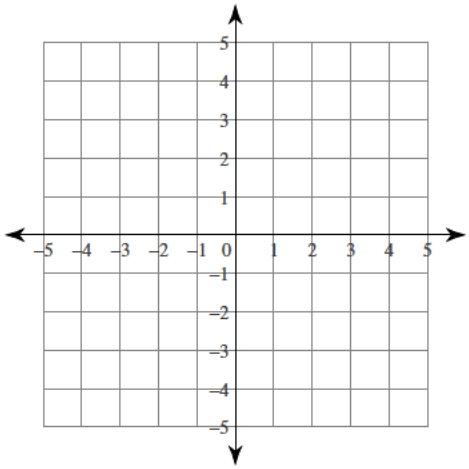
72) $x - 2y = -2$
$3x + 4y = -16$



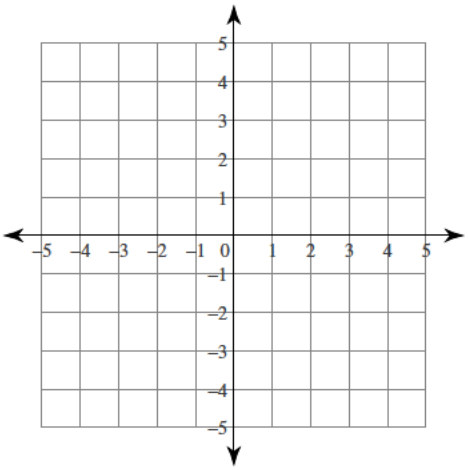
73) $x - 3y = -9$
$2x - y = 2$



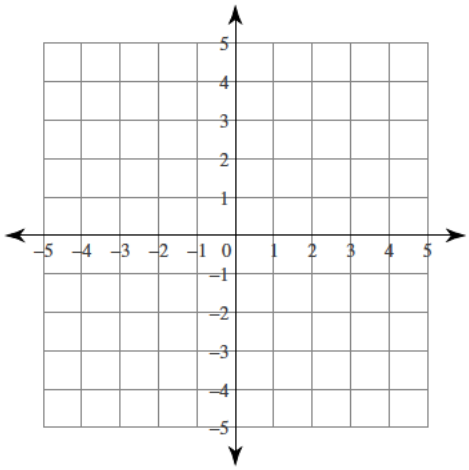
74) $x + y = 3$
$x - 4y = 8$



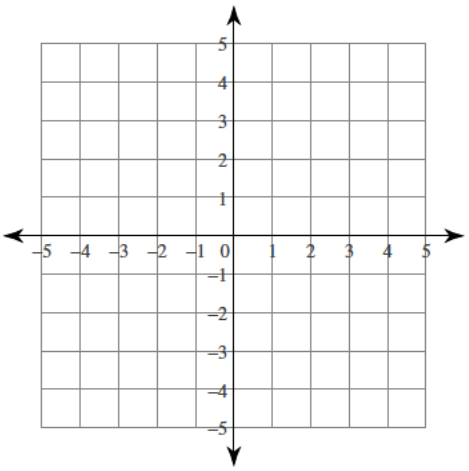
75) $x - 2y = -8$
$x + y = 1$



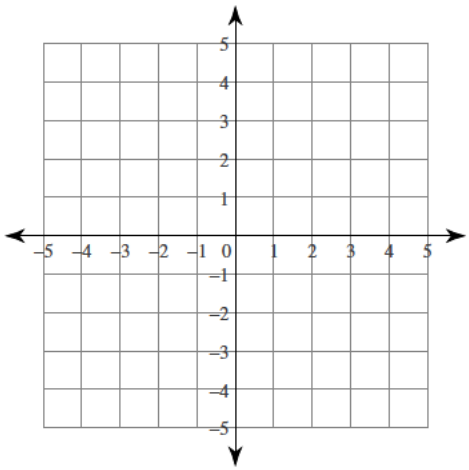
76) $7x + y = 4$
$x - y = 4$



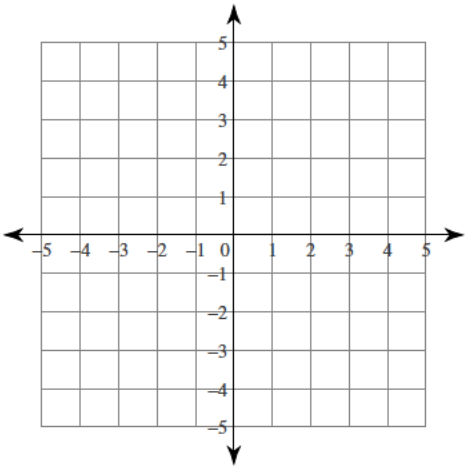
77) $4x + 3y = -3$
$x + 3y = 6$



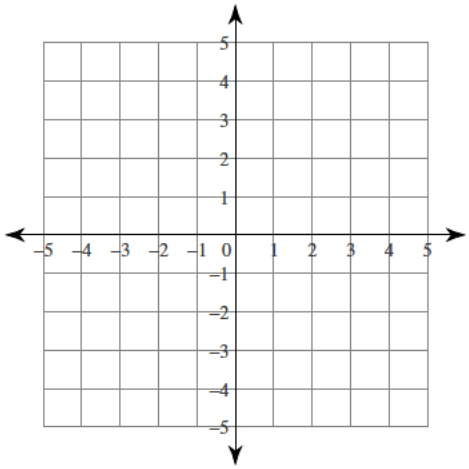
78) $3x - 2y = -8$
$x - 4y = 4$



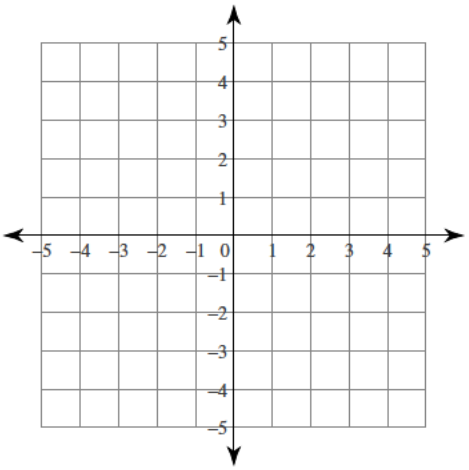
79) $x + 2y = 4$
$3x - 2y = 4$



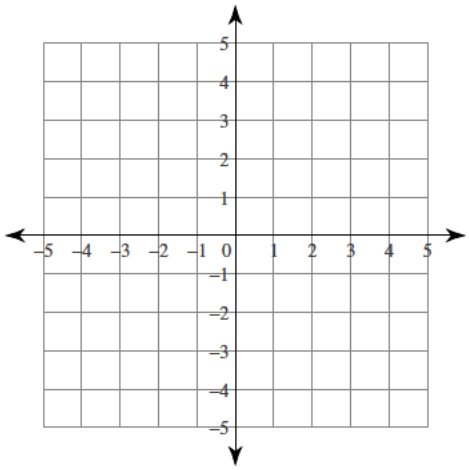
80) $5x - y = -4$
$2x + y = -3$



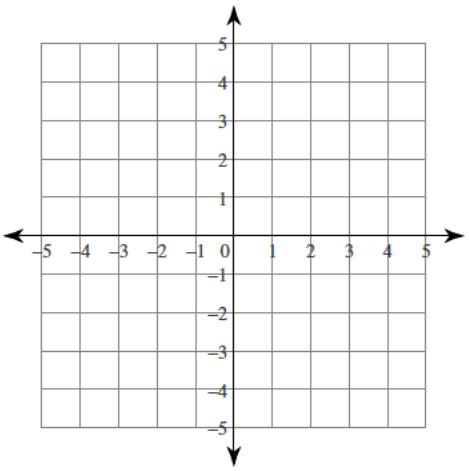
81) $2x + 3y = 6$
$2x + y = -2$



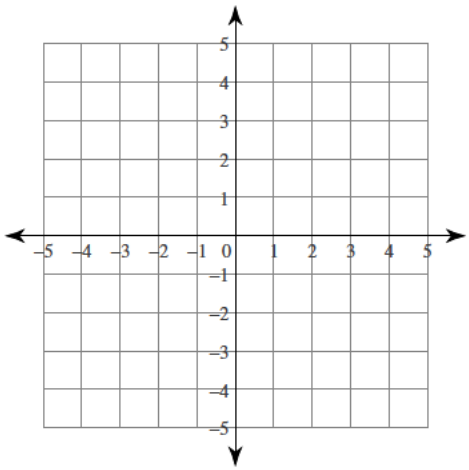
82) $x + y = 4$
$x = 2$



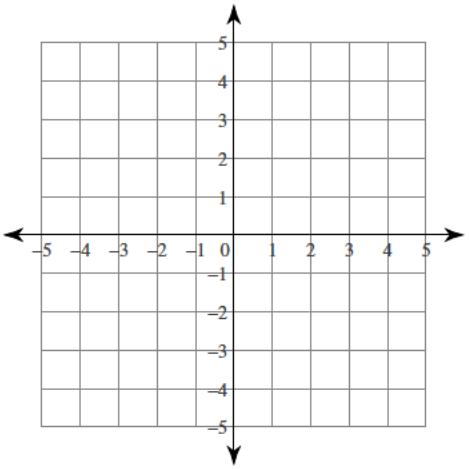
83) $7x + 2y = 6$
$x + 2y = -6$



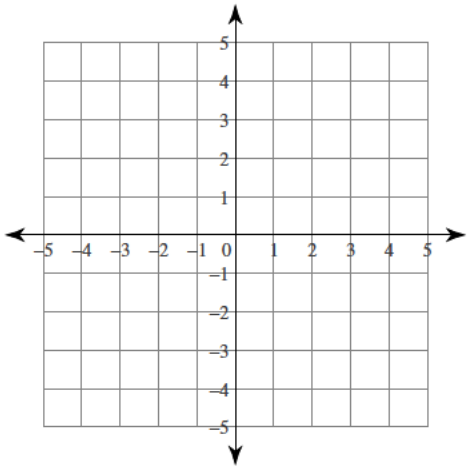
84) $x + y = -2$
$4x - y = -3$



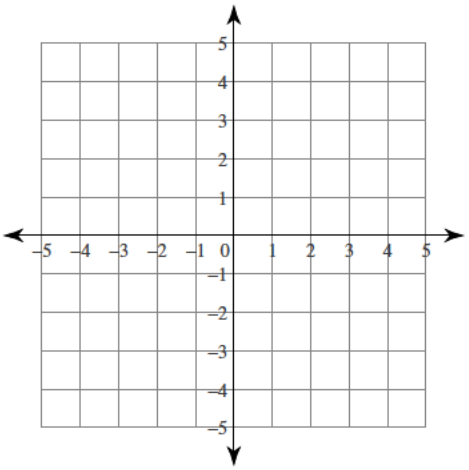
85) $x + 2y = -2$
$7x + 4y = 16$



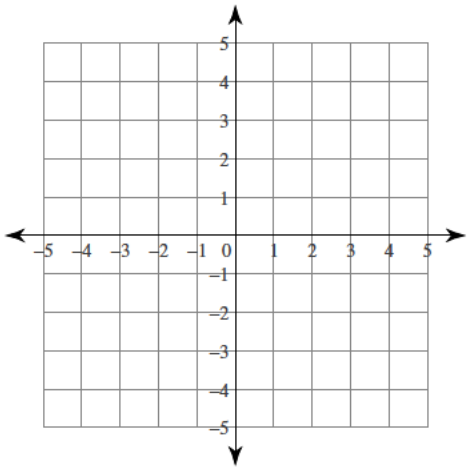
86) $5x + 2y = 6$
$x - 2y = 6$



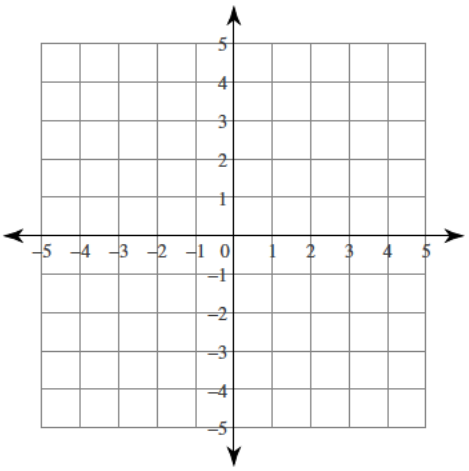
87) $x - 4y = 12$
$3x - 2y = -4$



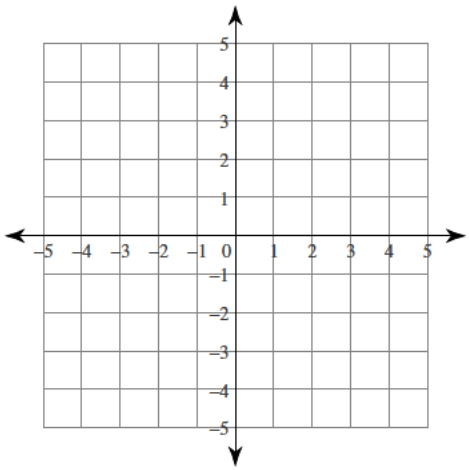
88) $5x - y = 2$
$x + y = 4$



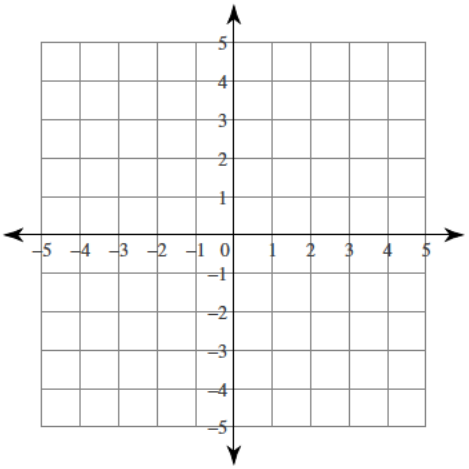
89) $7x - 3y = 12$
$x - 3y = -6$



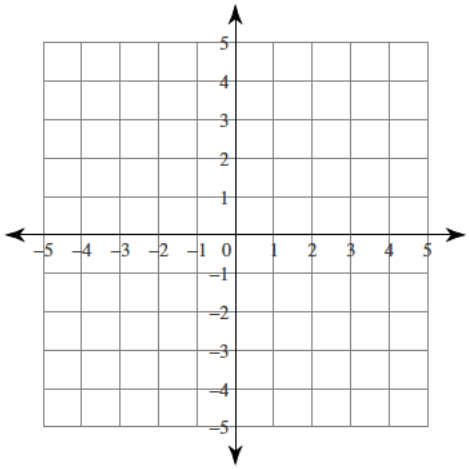
90) $3x + 4y = 4$
$x - 4y = 12$



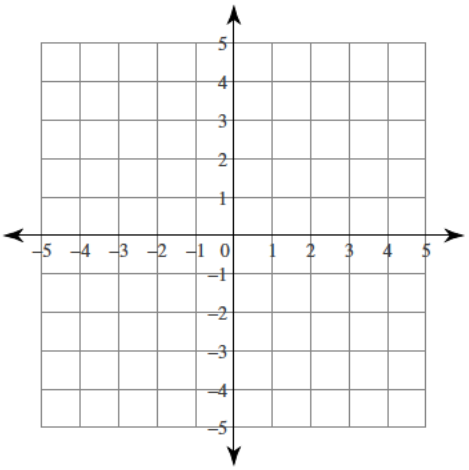
91) $x - 3y = -6$
$x - 3y = 3$



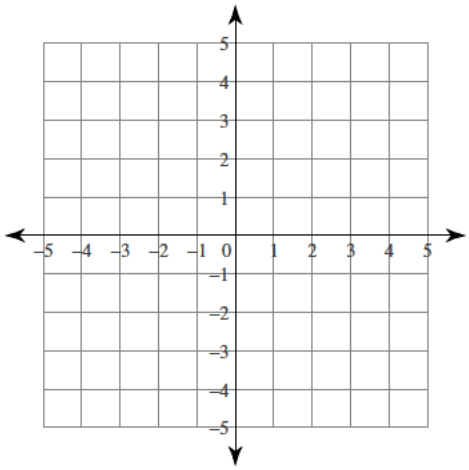
92) $4x + 3y = 6$
$x + 3y = -3$



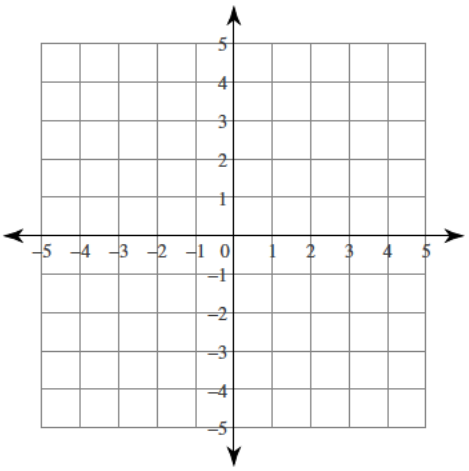
93) $x - 4y = -12$
$x + y = -2$



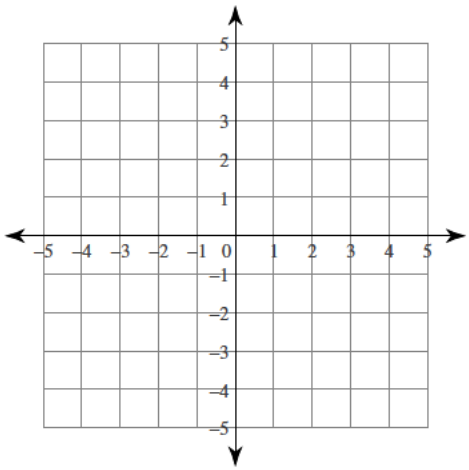
94) $6x + y = -2$
$y = 4$



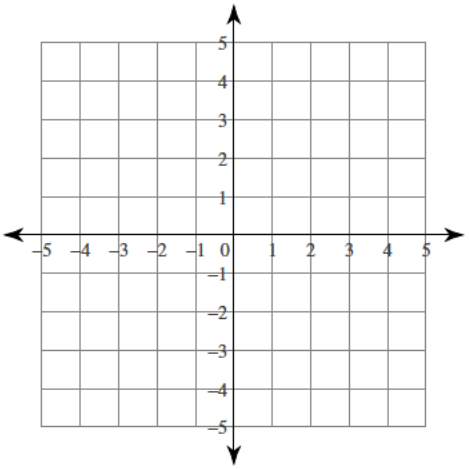
95) $3x - 2y = 8$
$x - 2y = 4$



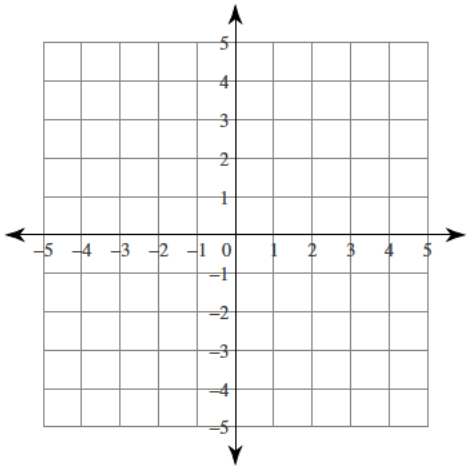
96) $7x - 4y = 16$
$x - 2y = -2$



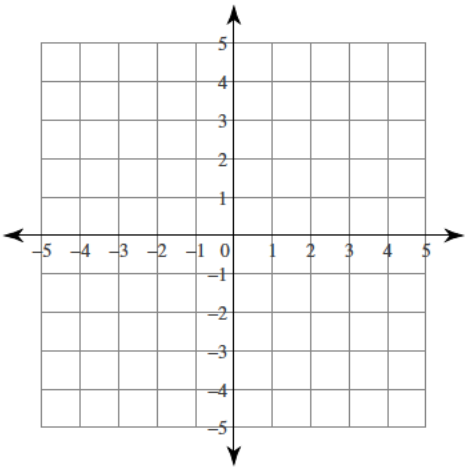
97) $x + y = -3$
$x + y = 2$



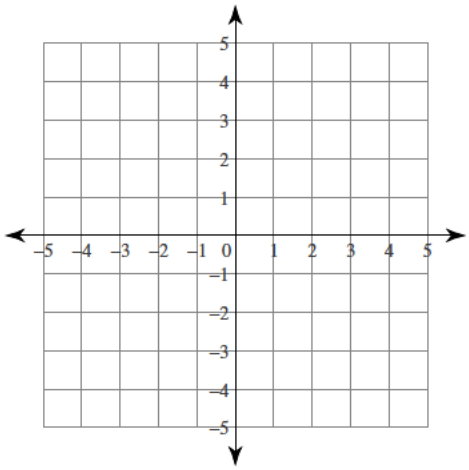
98) $x - y = 1$
$x + 4y = 16$



99) $x - 2y = 4$
$x + 2y = -8$



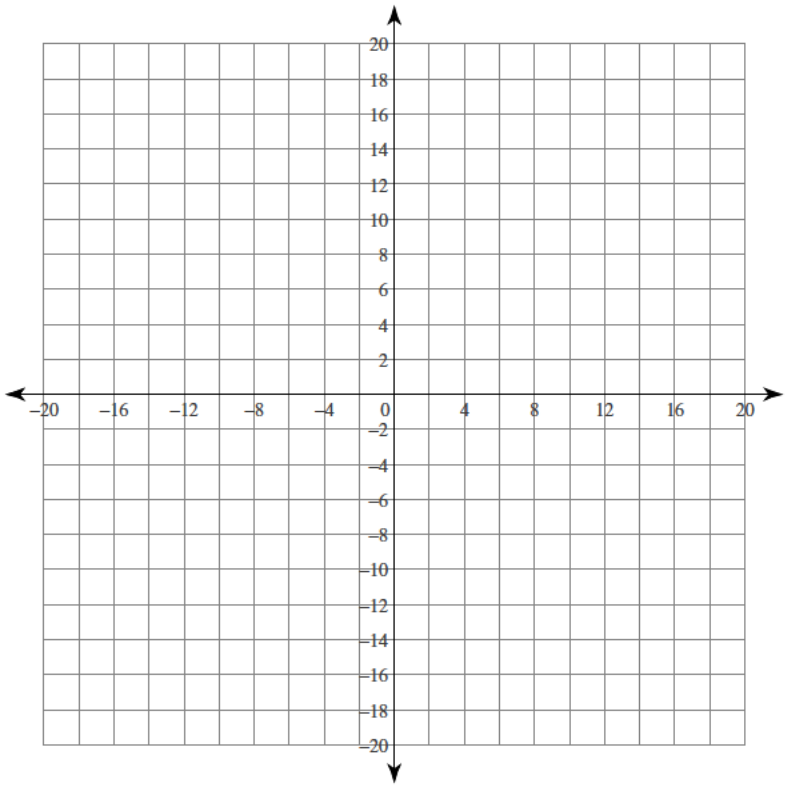
100) $5x - 3y = -9$
$x - 3y = 3$



Solve each system by graphing.

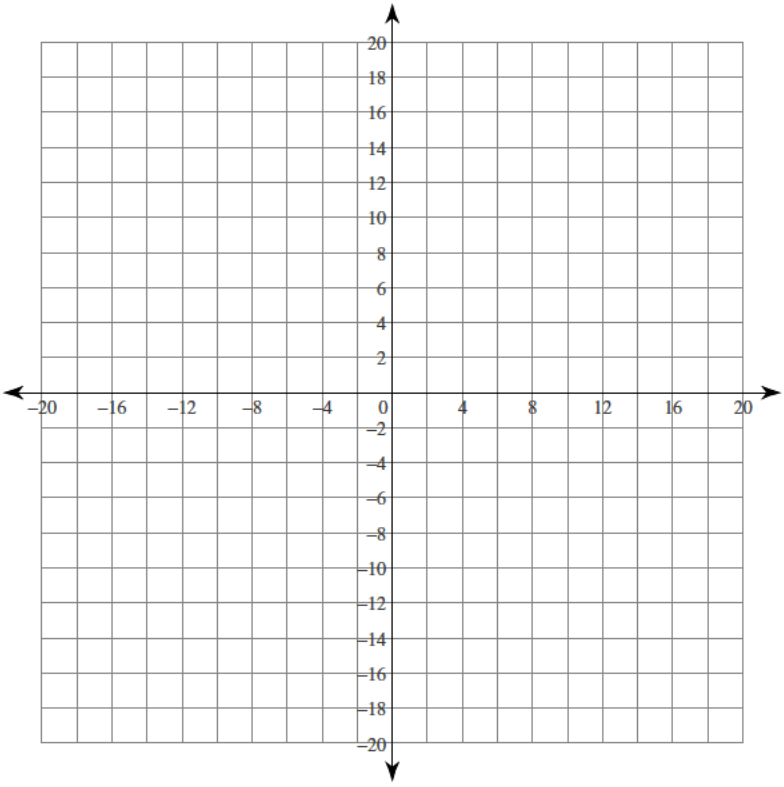
101) $y = -\frac{6}{7}x + 1$

$y = -\frac{6}{7}x + 16$



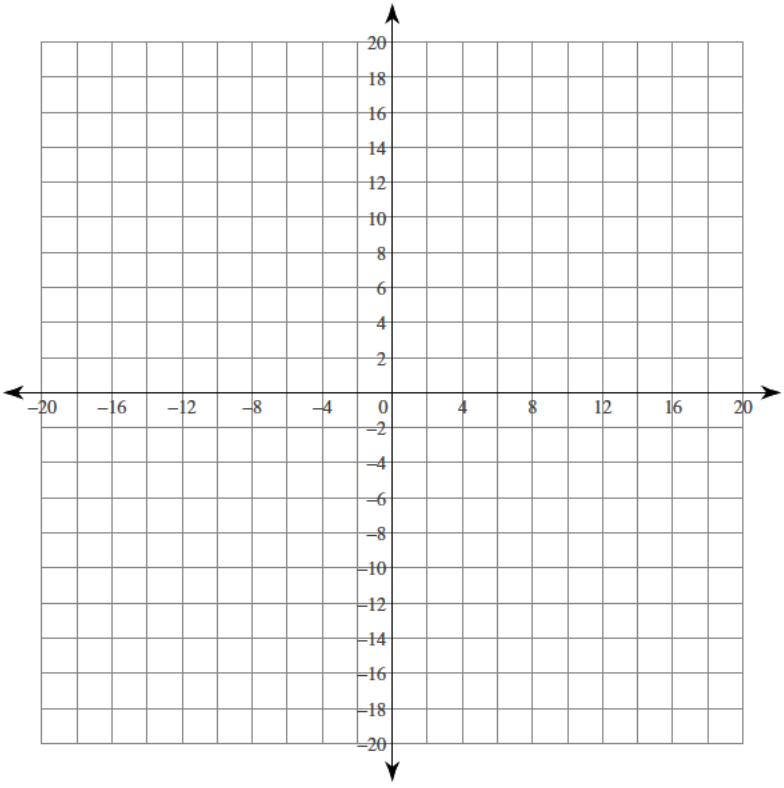
102) $y = -\frac{11}{9}x - 19$

$y = \frac{4}{3}x + 4$



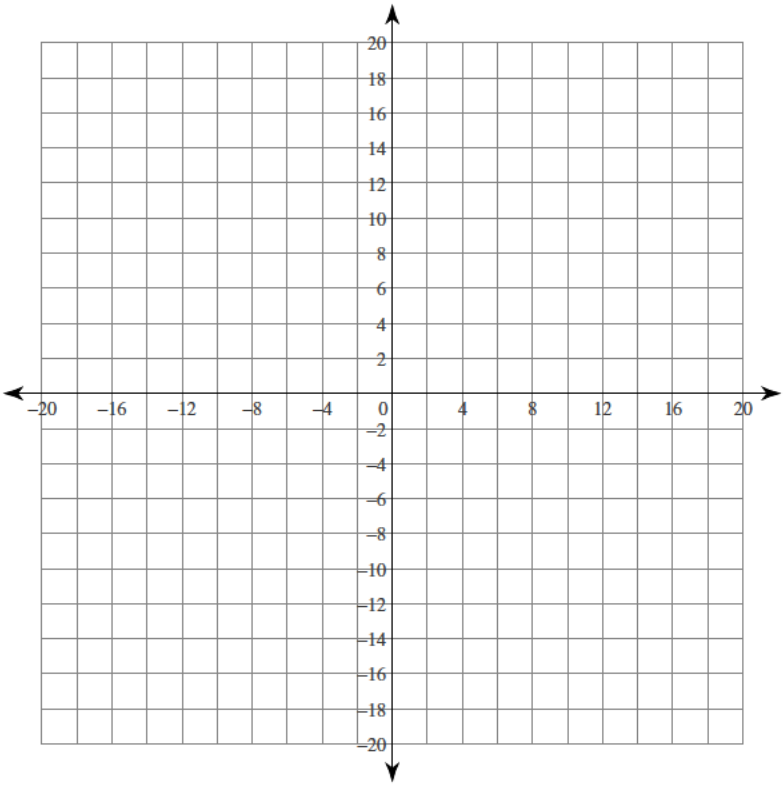
103) $x = 14$

$y = -\frac{2}{7}x + 6$



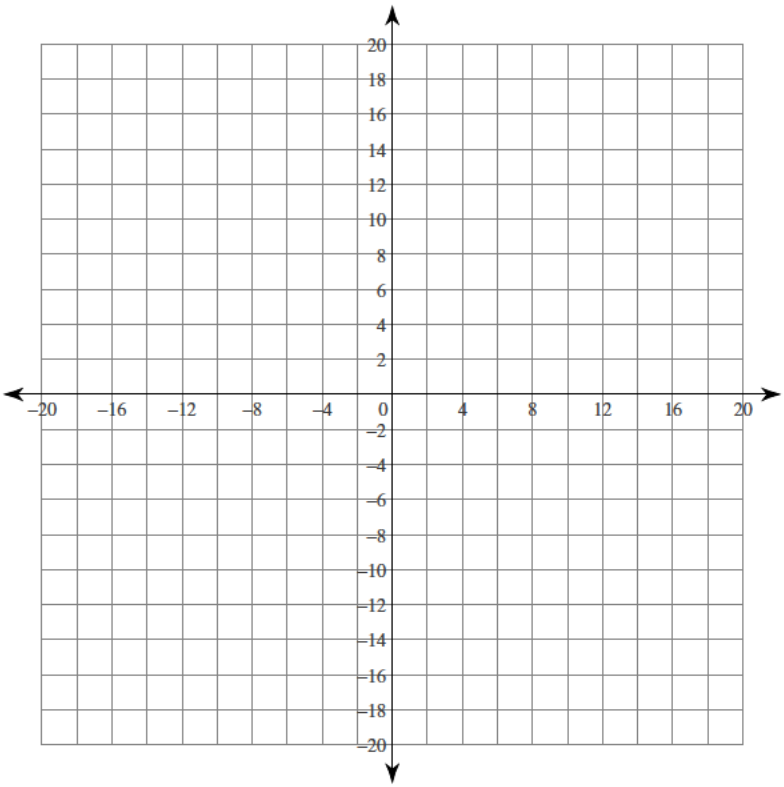
104) $y = -1$

$y = 11x + 10$



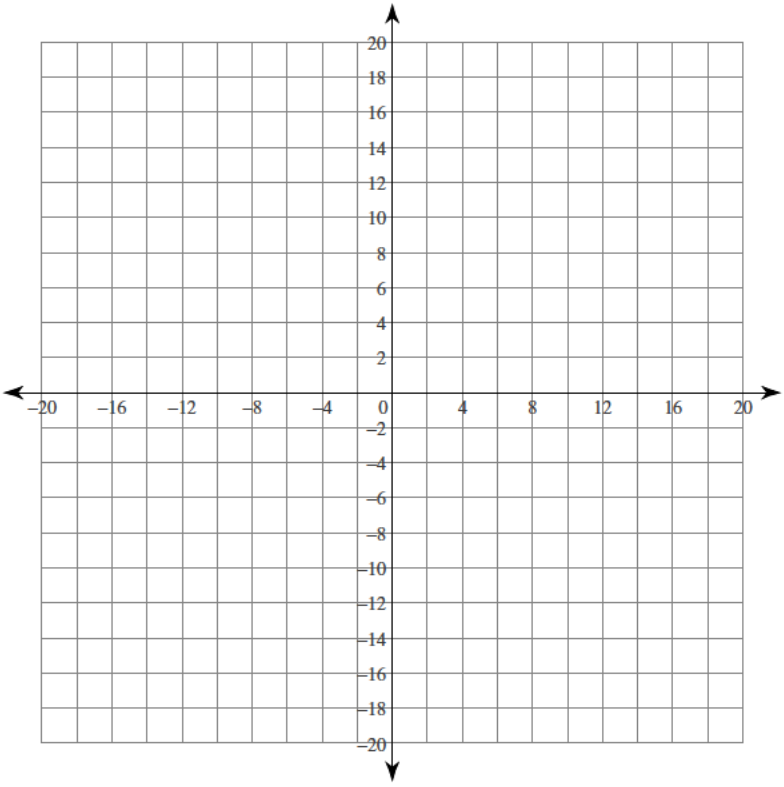
105) $y = \frac{3}{2}x + 8$

$y = -6x - 7$



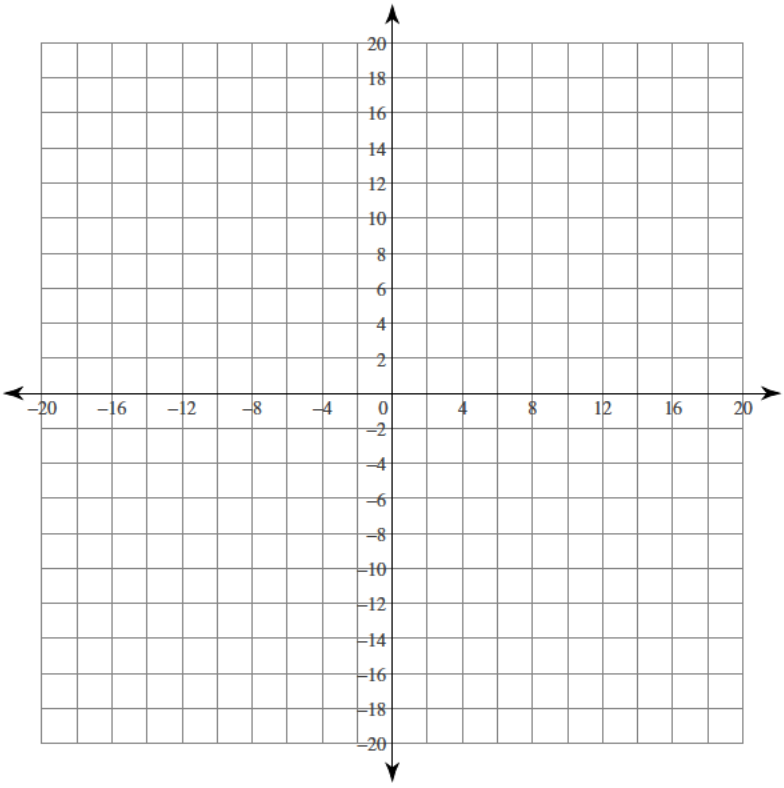
106) $y = -\frac{2}{7}x - 1$

$y = \frac{2}{7}x - 9$



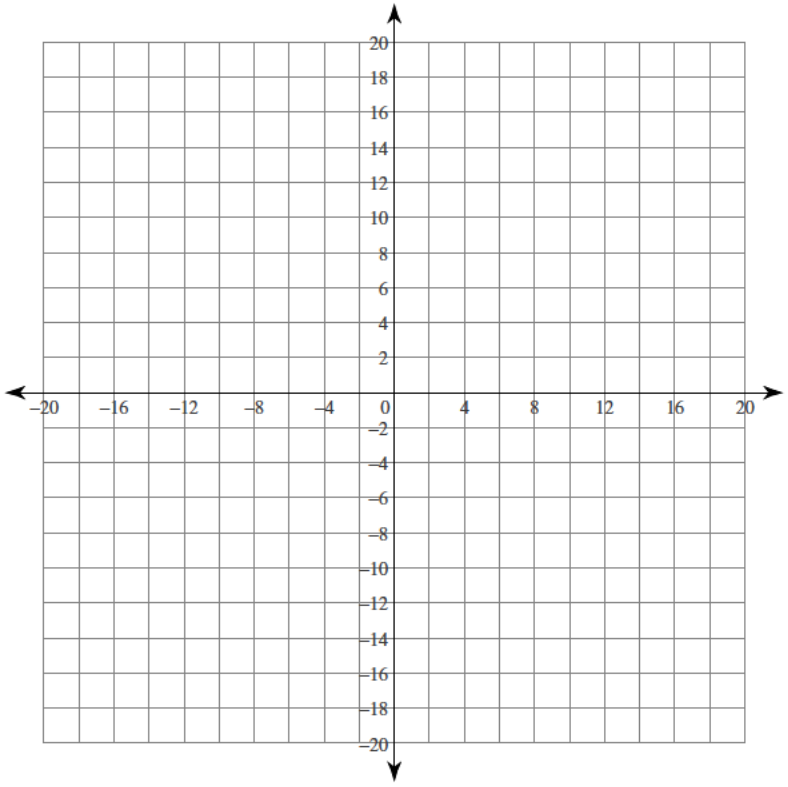
107) $y = \frac{11}{17}x + 19$

$y = -\frac{27}{17}x - 19$



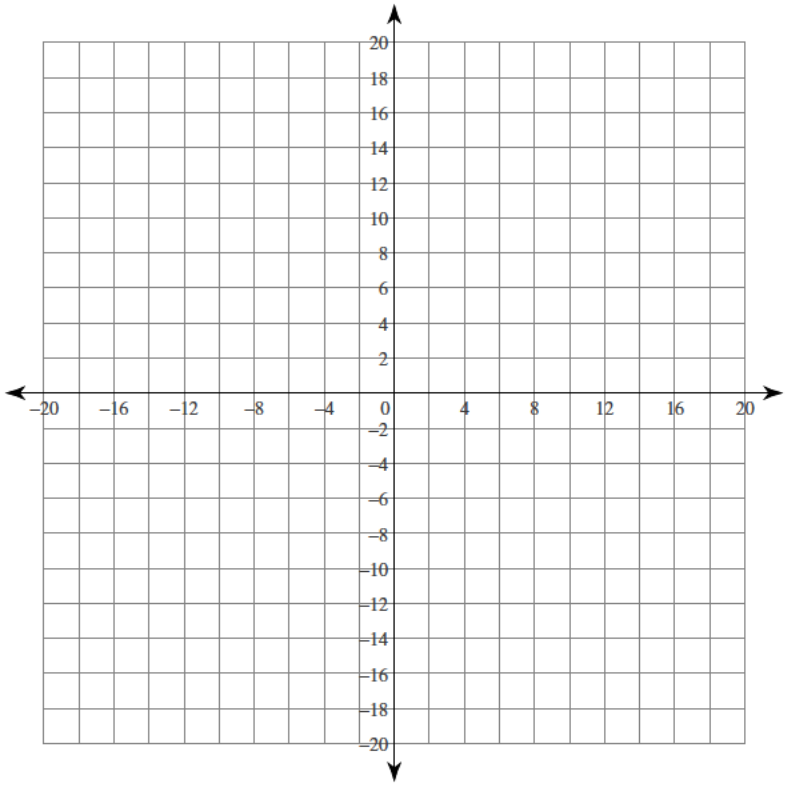
108) $y = \frac{2}{17}x + 17$

$y = -\frac{27}{17}x - 12$



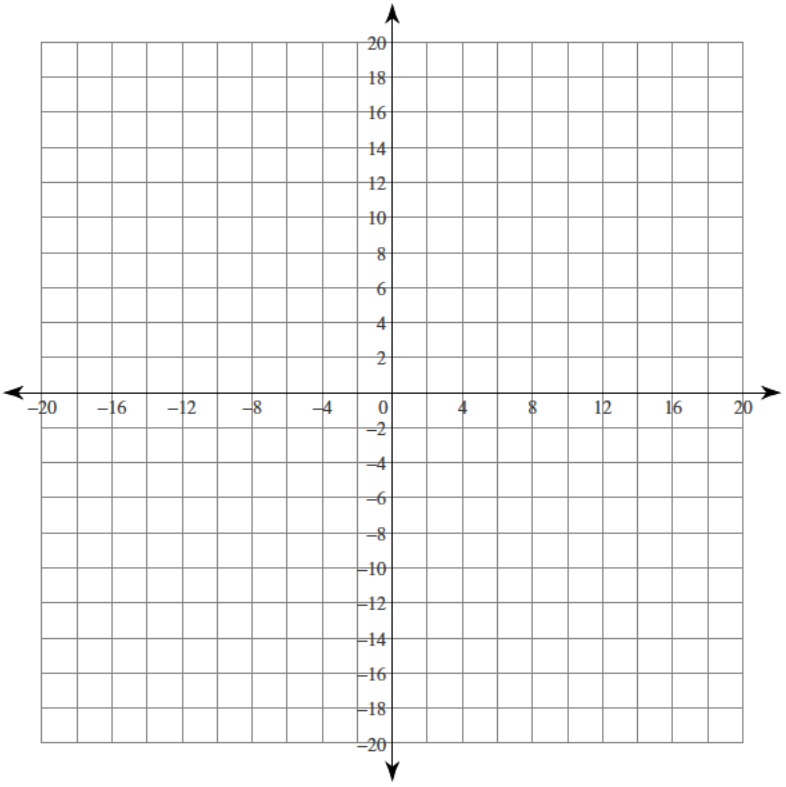
109) $y = x + 14$

$y = -10x - 8$



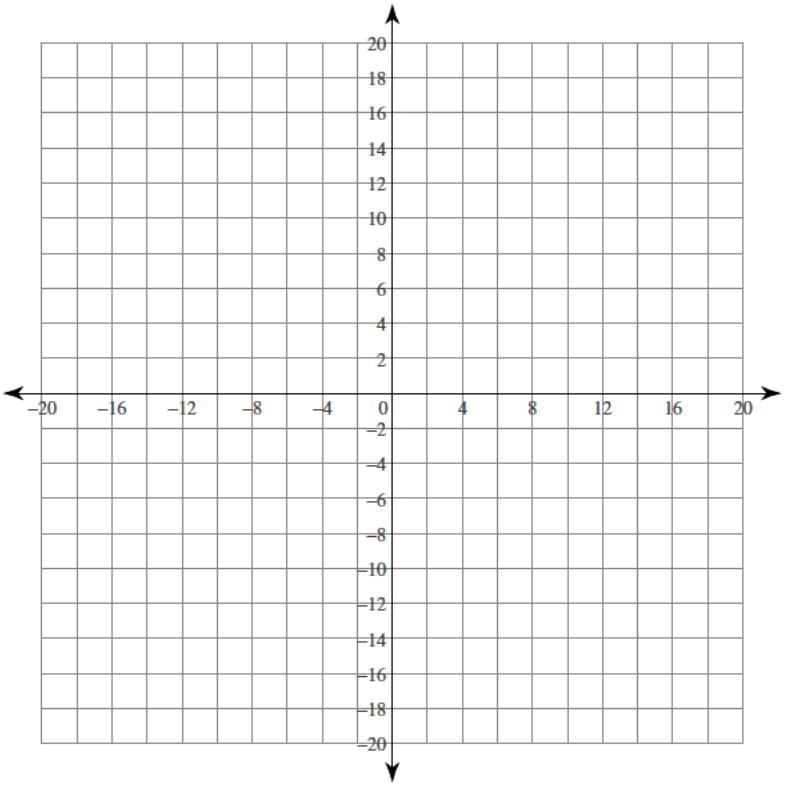
110) $y = \frac{7}{2}x - 3$

$y = \frac{2}{3}x + 14$



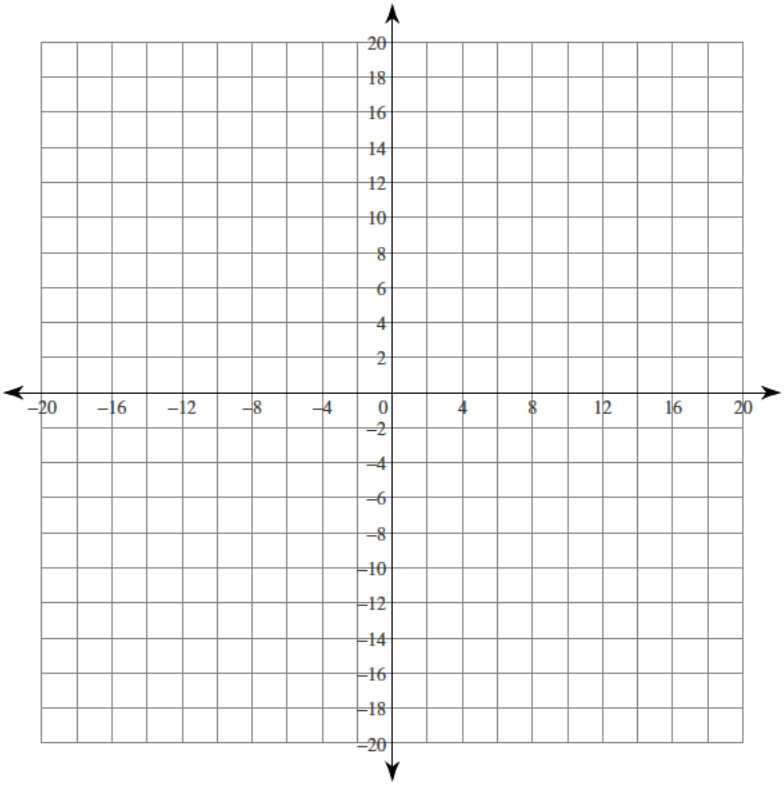
111) $y = -\frac{1}{6}x - 13$

$y = -\frac{1}{6}x - 10$



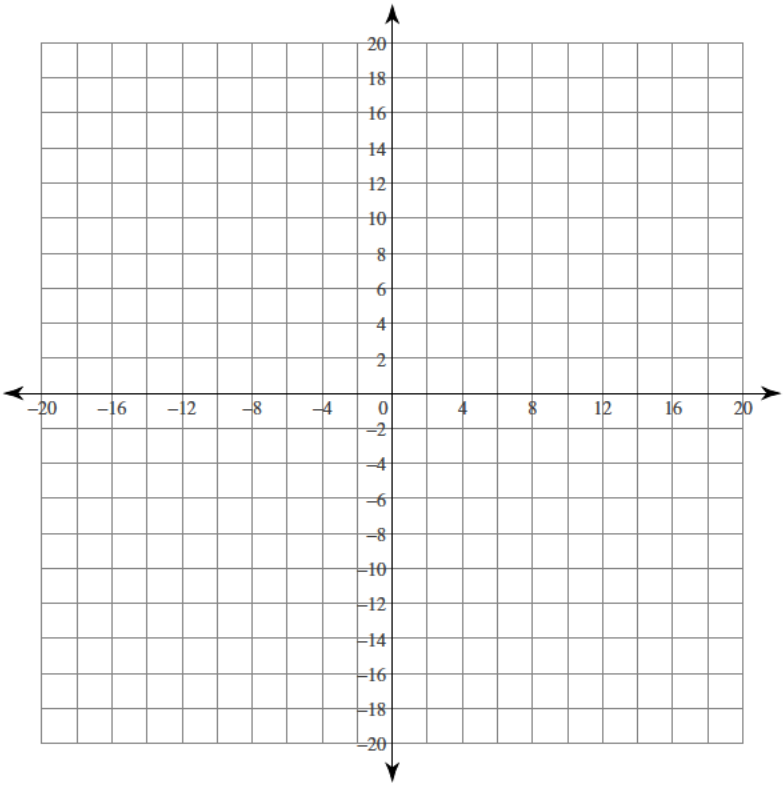
112) $y = \frac{4}{3}x + 7$

$y = \frac{4}{3}x + 2$



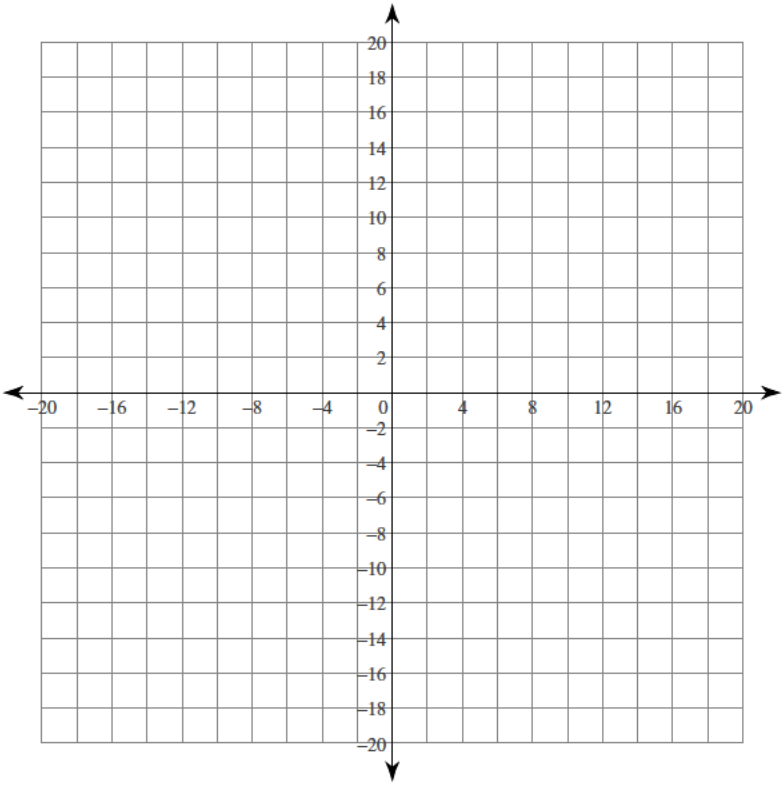
113) $y = \frac{21}{10}x + 10$

$y = \frac{1}{2}x - 6$



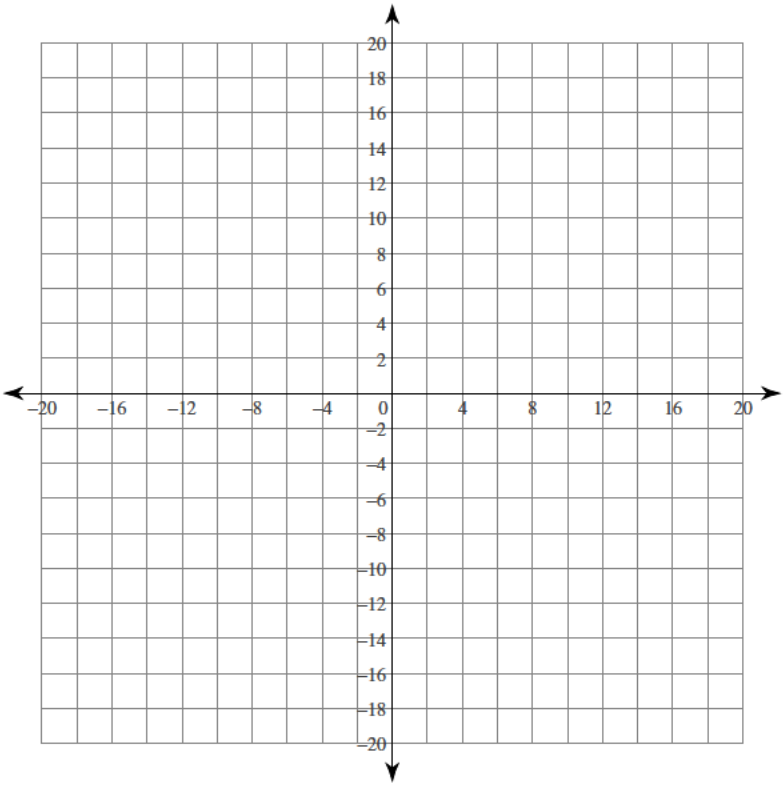
114) $y = -\frac{7}{3}x + 6$

$y = -\frac{1}{2}x - 5$



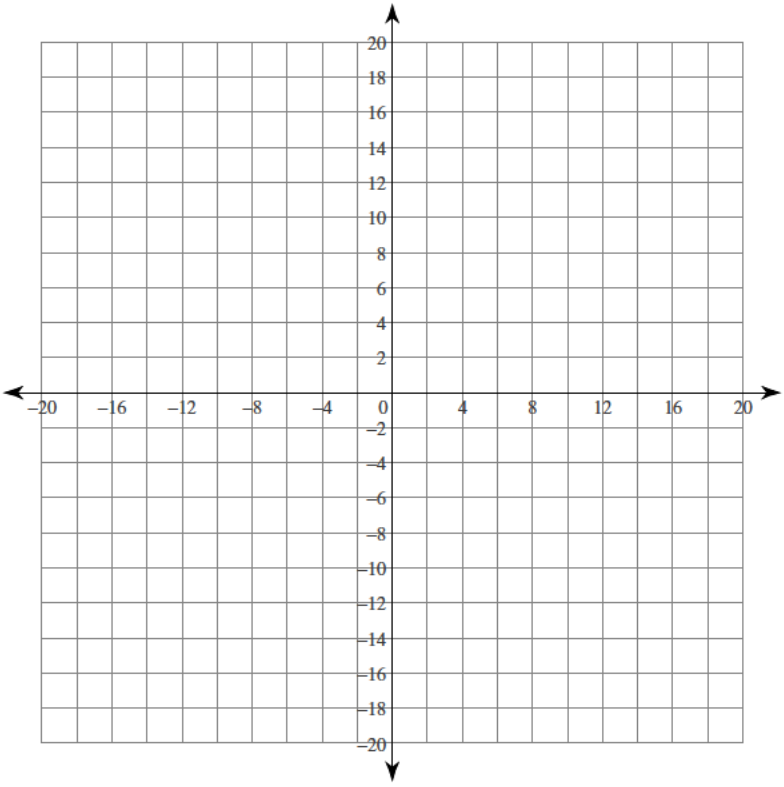
115) $y = -\frac{3}{14}x + 2$

$y = -\frac{17}{14}x + 16$



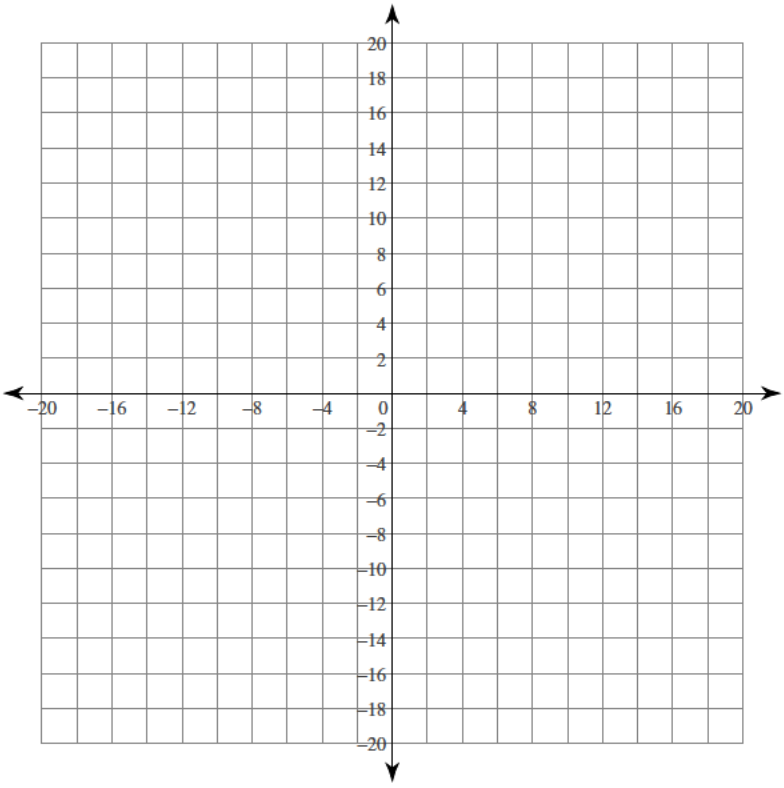
116) $y = \frac{7}{5}x + 10$

$y = -\frac{1}{10}x - 5$



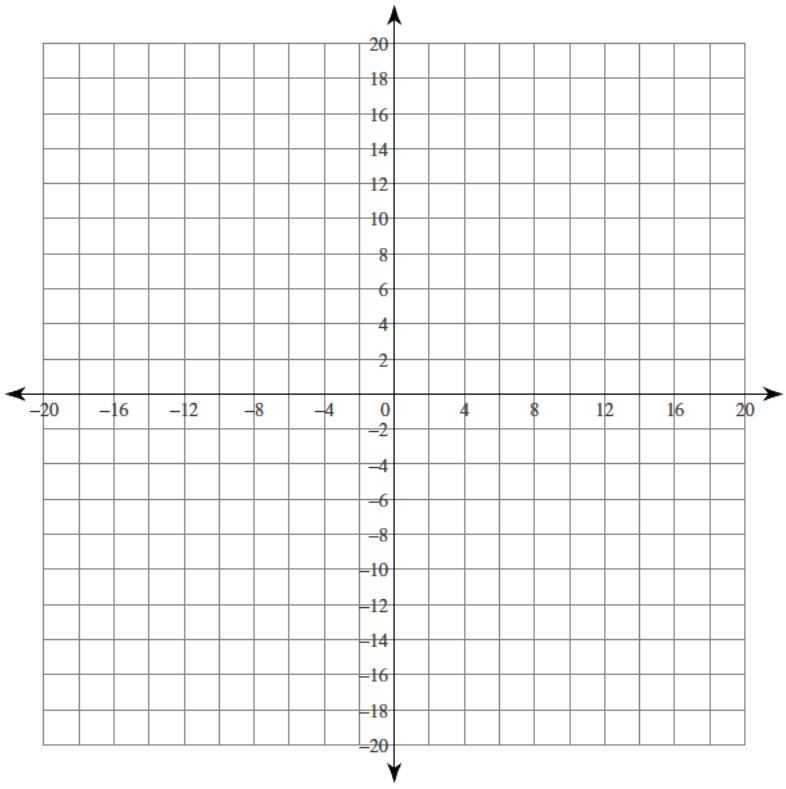
117) $y = -\frac{8}{5}x - 14$

$y = -\frac{3}{10}x - 1$



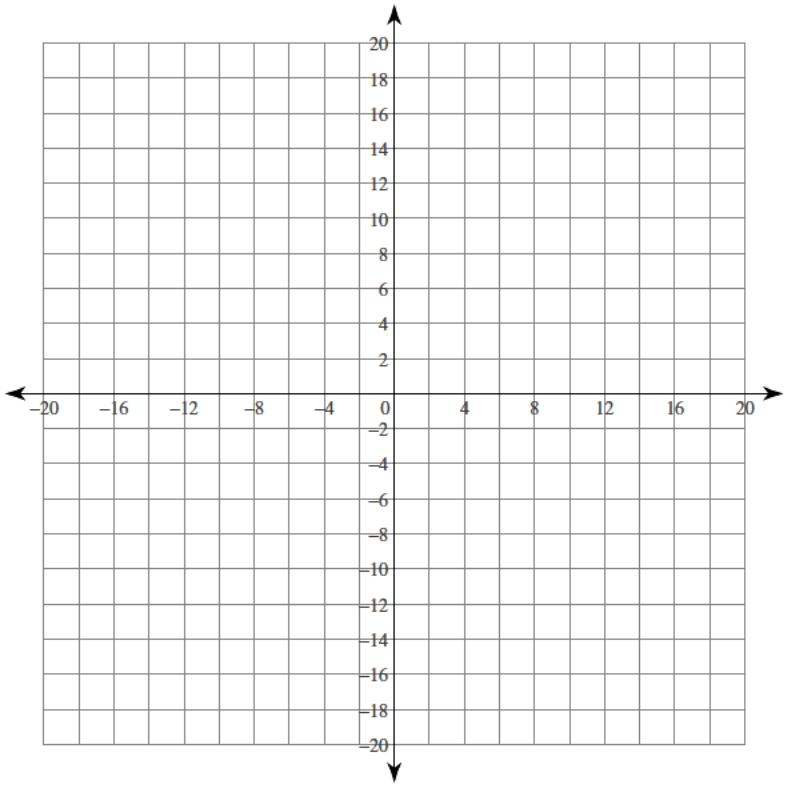
118) $y = -\frac{25}{2}x - 16$

$y = 2x + 13$



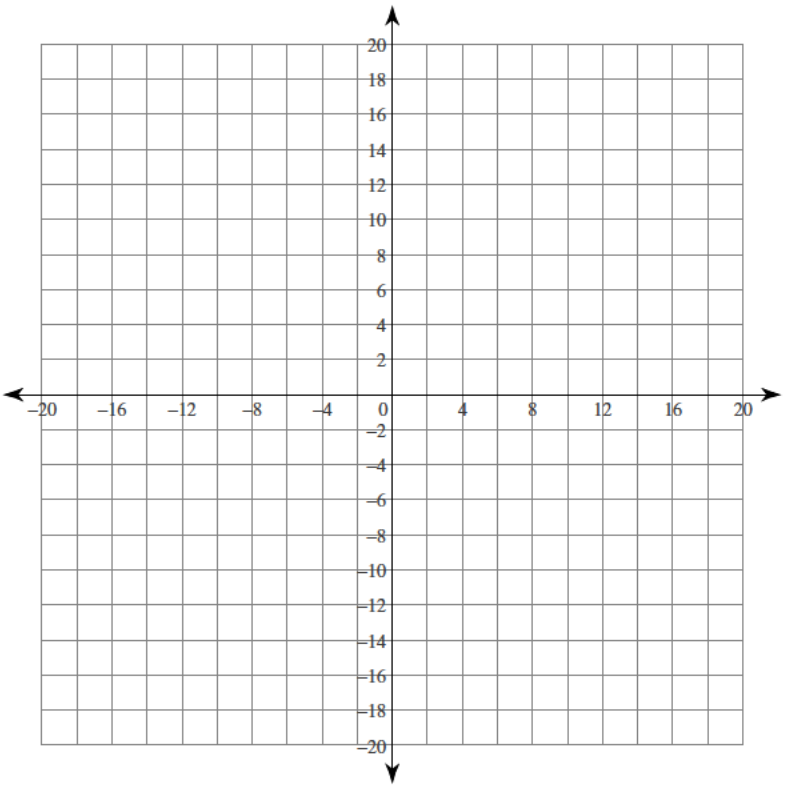
119) $y = \frac{20}{13}x - 8$

$y = -\frac{7}{13}x + 19$



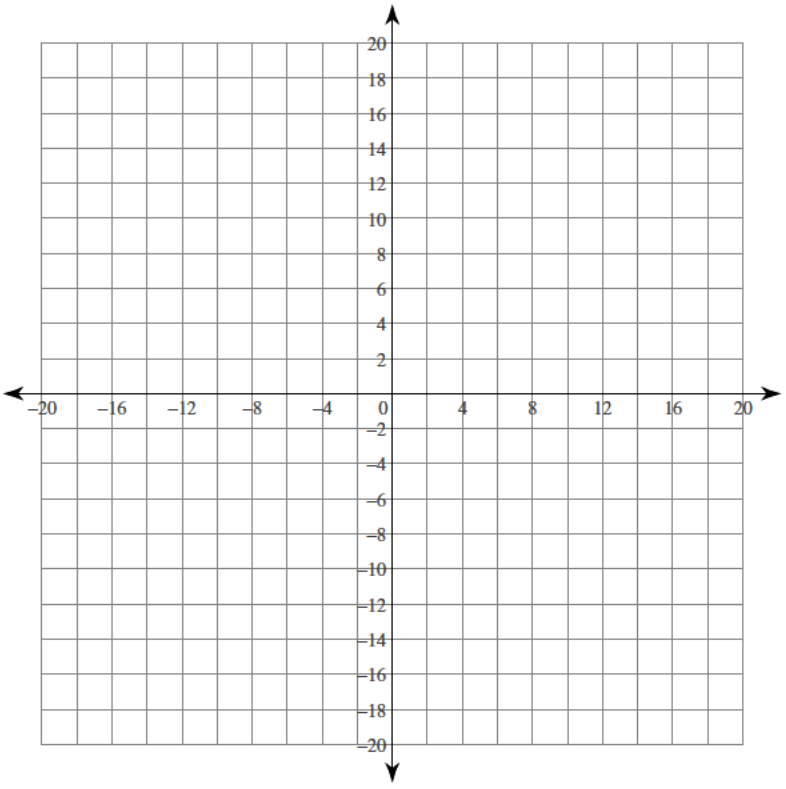
120) $y = \frac{1}{13}x + 4$

$y = \frac{19}{13}x - 14$



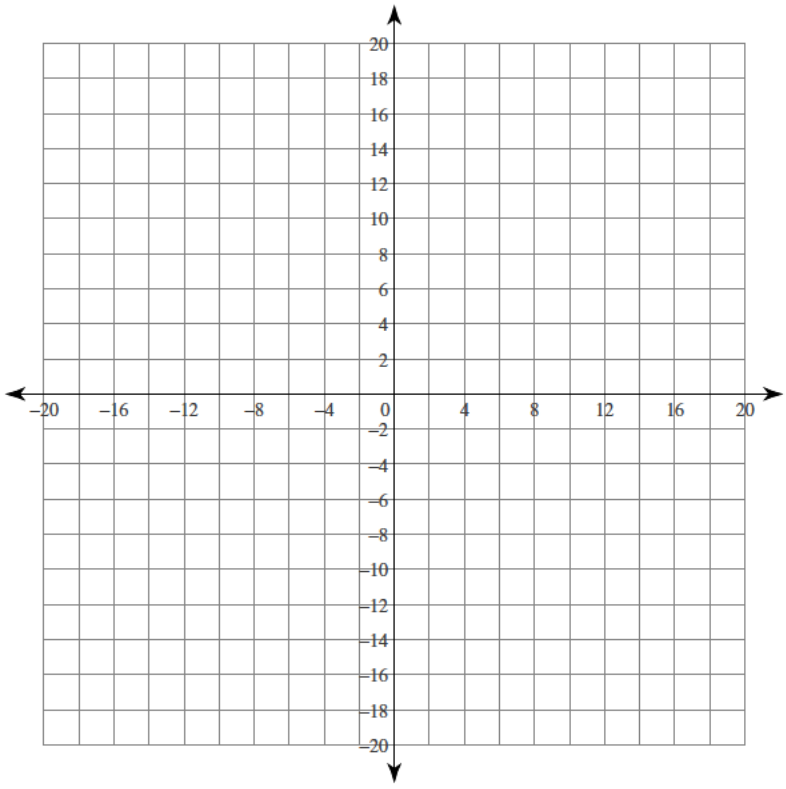
121) $y = -x + 13$

$y = -\frac{27}{2}x - 12$



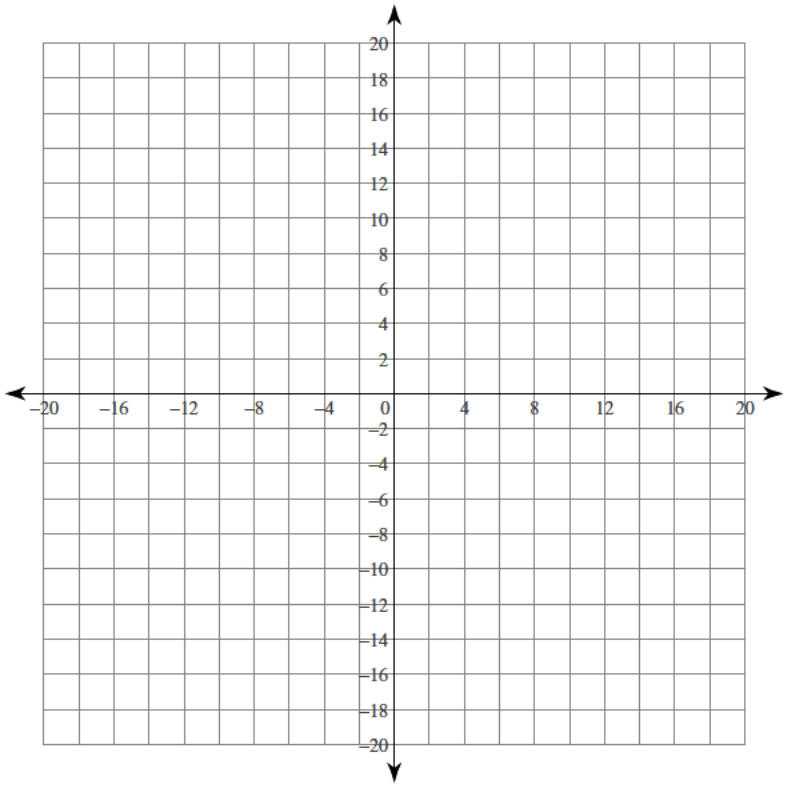
122) $y = -\frac{1}{6}x - 17$

$x = -18$



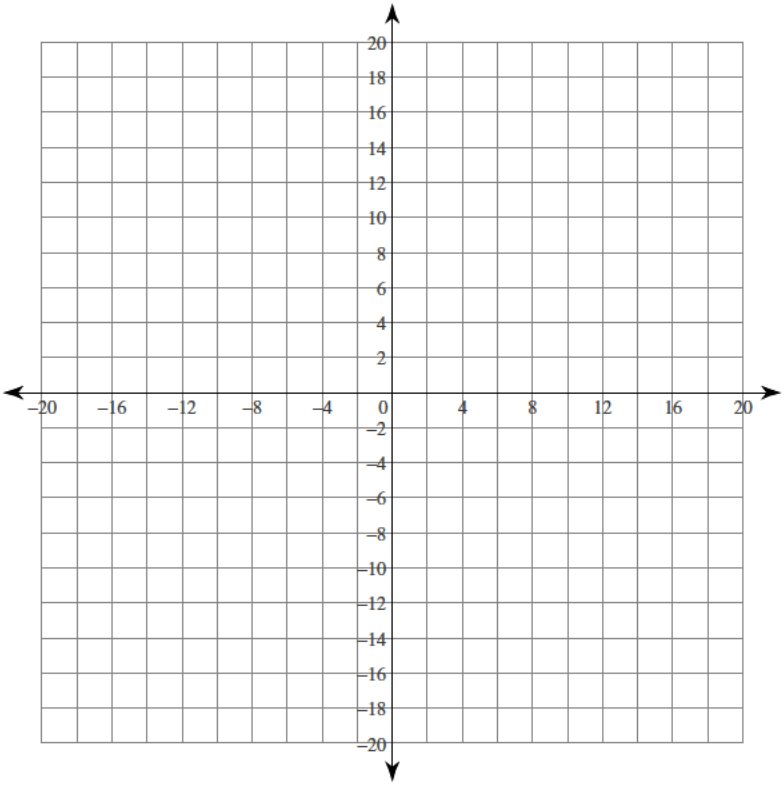
123) $y = -\frac{13}{9}x - 8$

$y = -\frac{13}{9}x + 15$



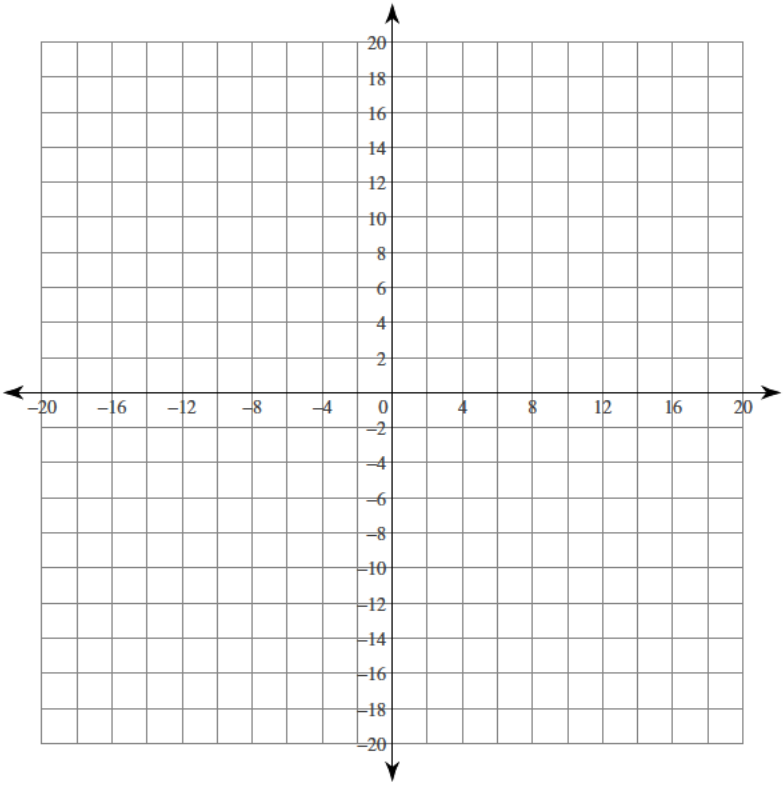
124) $y = \frac{13}{3}x - 4$

$y = \frac{13}{3}x - 14$



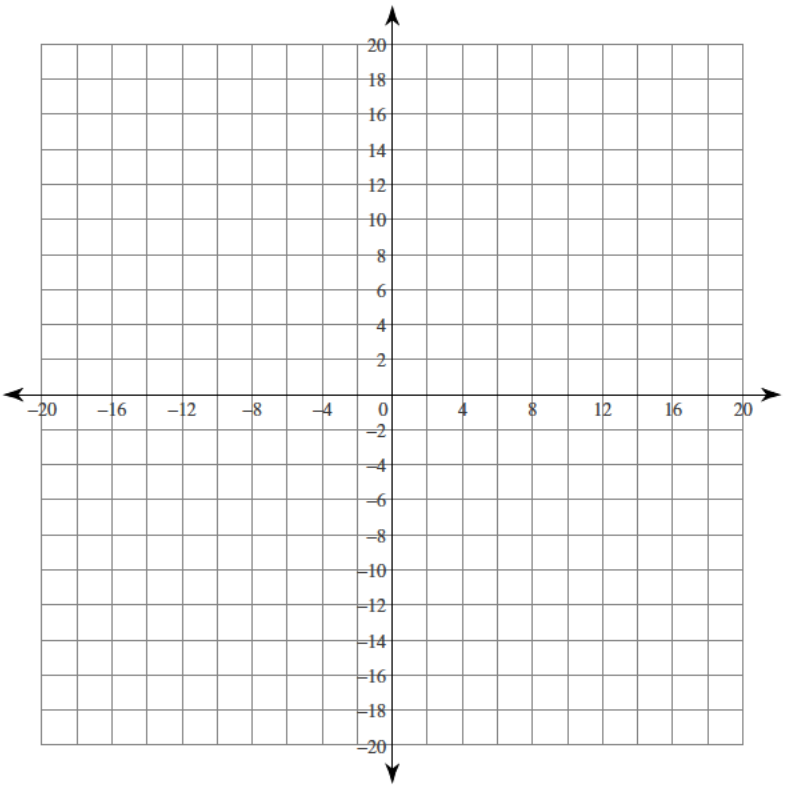
125) $y = \frac{12}{5}x - 16$

$y = -3x + 11$



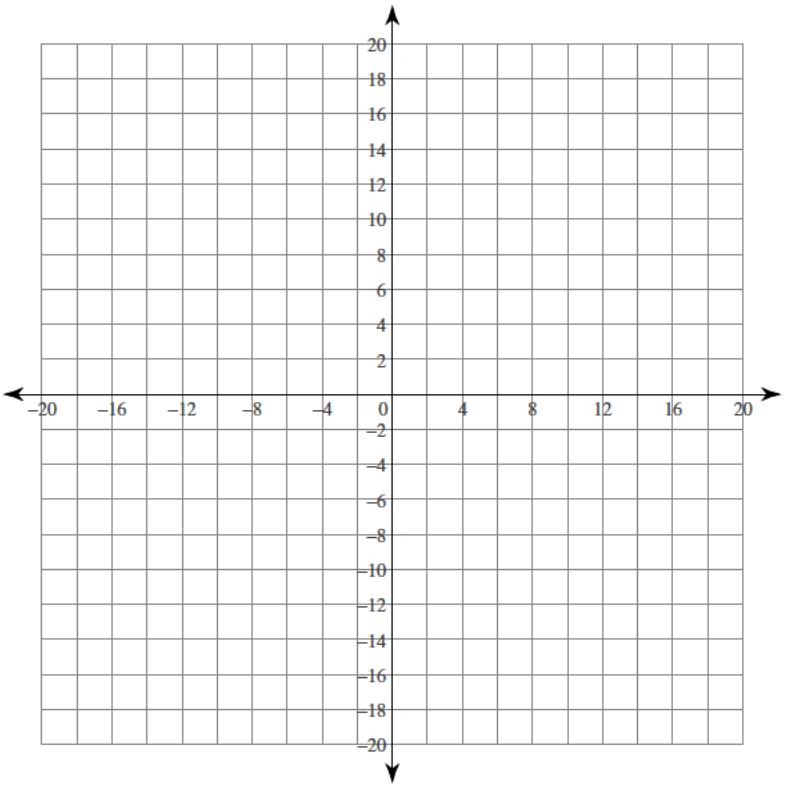
126) $y = \frac{19}{18}x + 12$

$y = \frac{2}{9}x - 3$



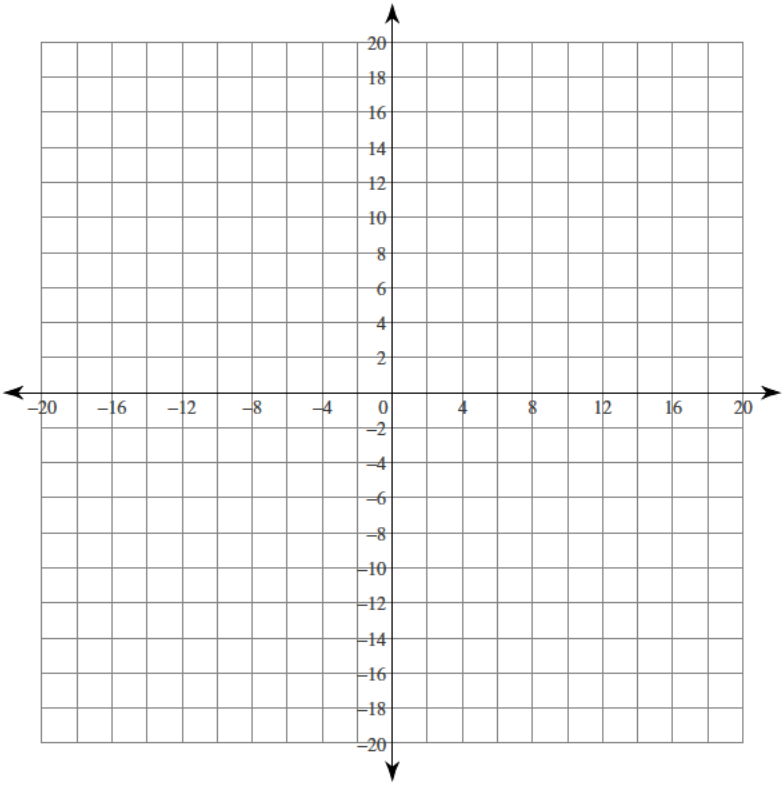
127) $y = -\frac{26}{5}x + 15$

$y = -\frac{2}{5}x - 9$



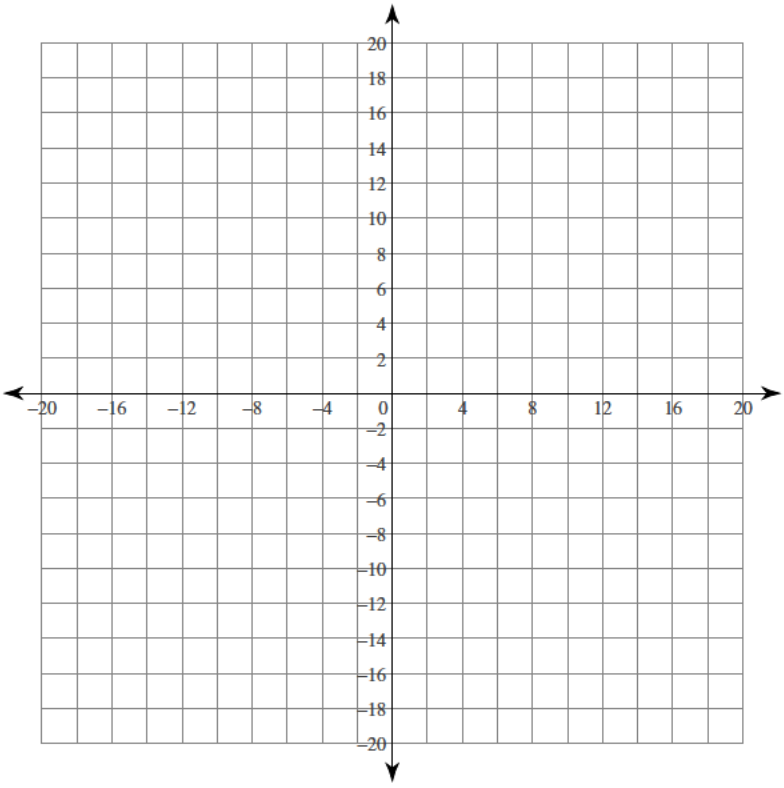
128) $y = \frac{13}{5}x - 11$

$y = \frac{3}{5}x - 1$



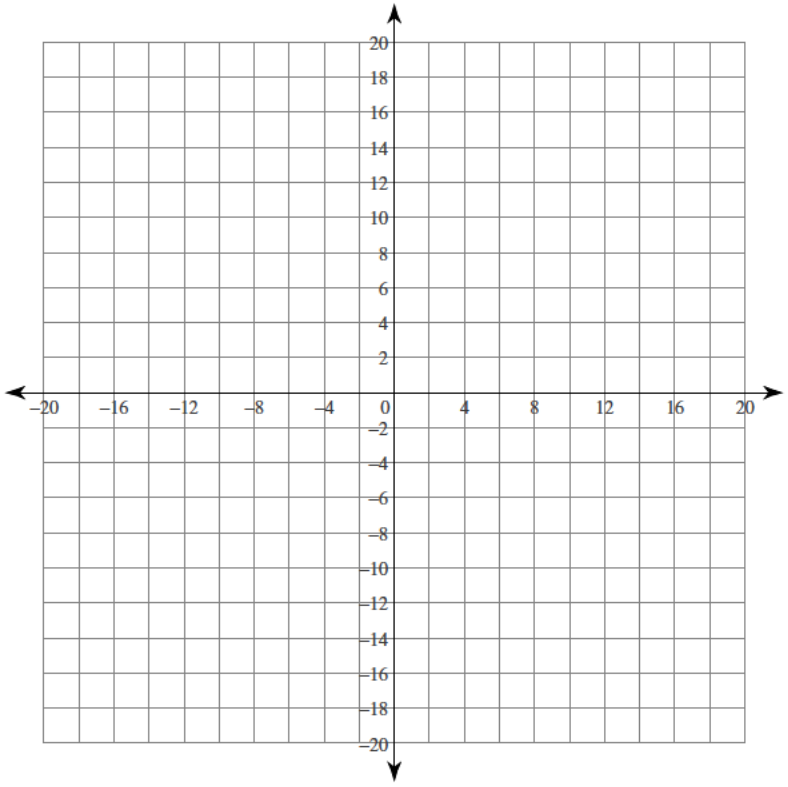
129) $y = -\frac{18}{11}x - 19$

$y = \frac{19}{11}x + 18$



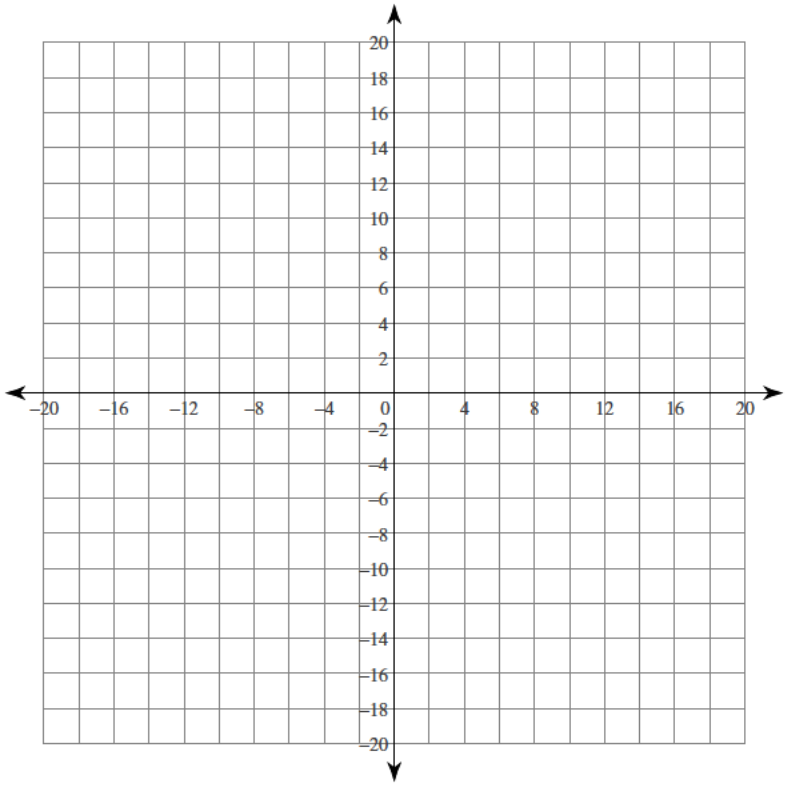
130) $y = -\frac{19}{11}x - 13$

$y = \frac{7}{11}x + 13$



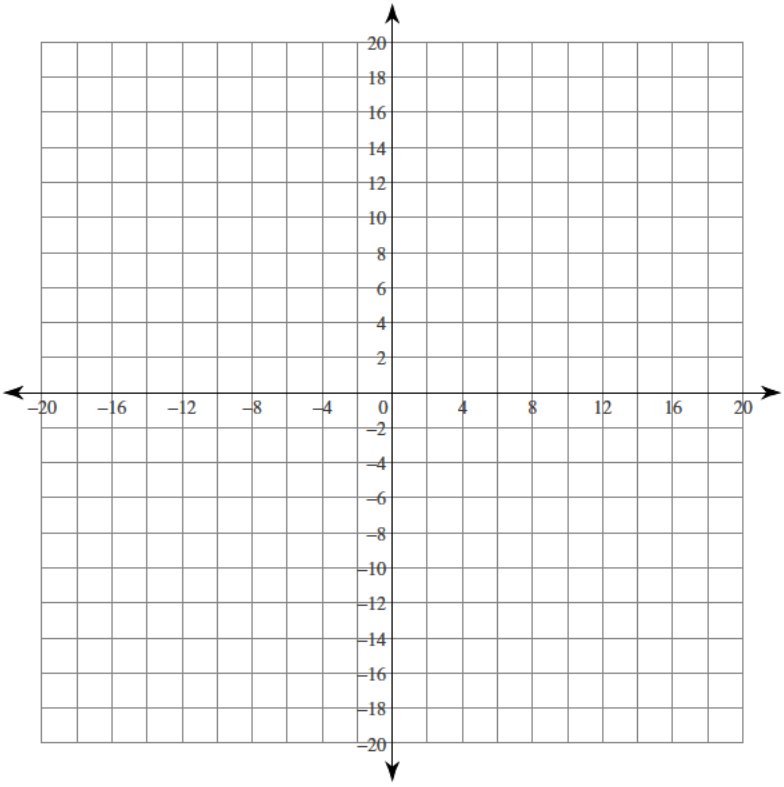
131) $y = 12$

$y = -x + 1$



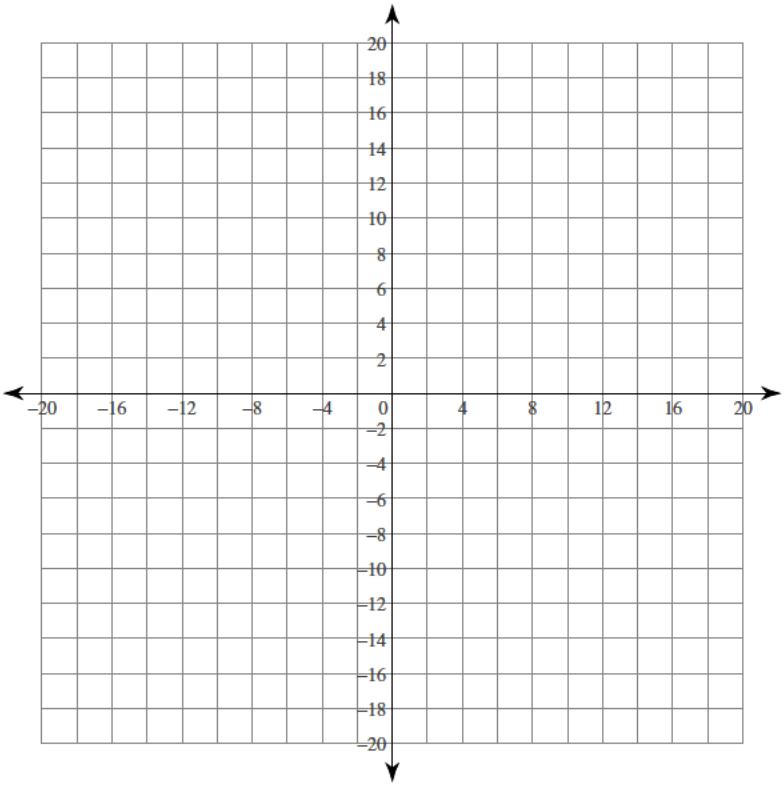
132) $y = \frac{1}{2}x + 9$

$y = \frac{1}{2}x - 19$



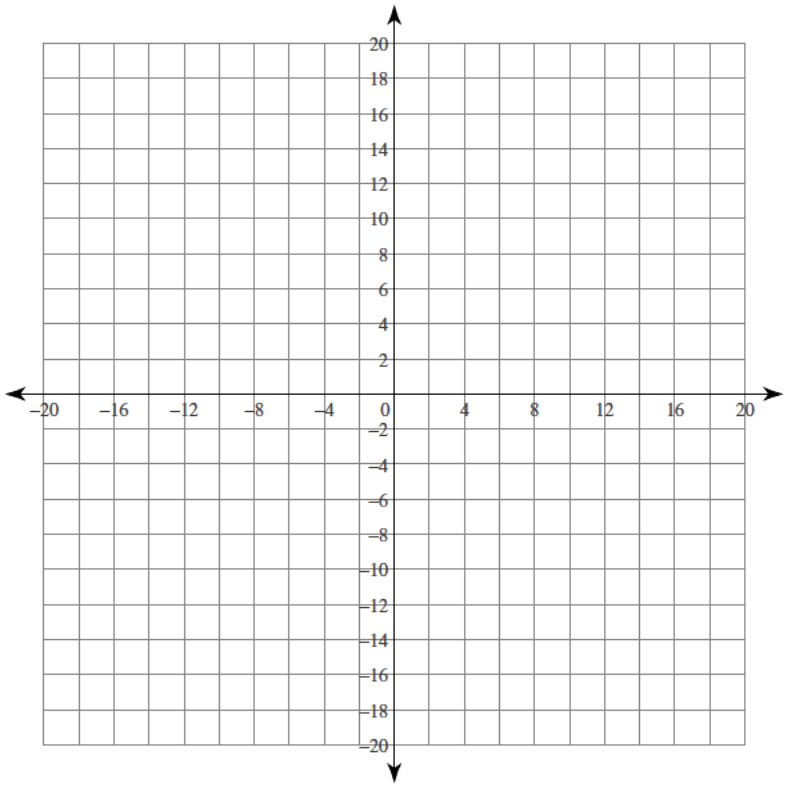
133) $y = -\frac{31}{3}x - 12$

$y = -\frac{31}{3}x + 8$



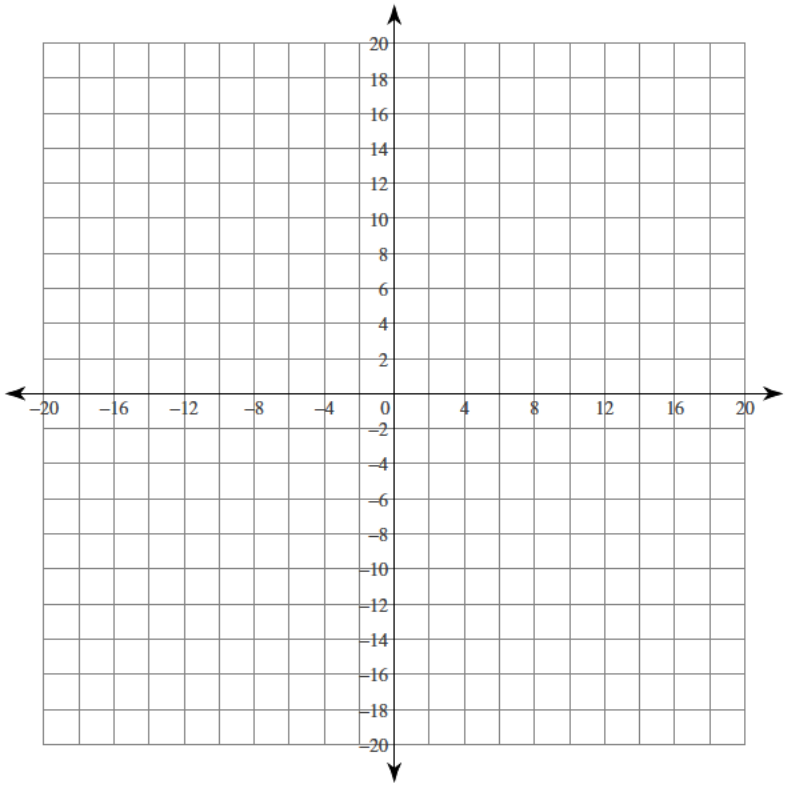
134) $y = \frac{31}{3}x + 17$

$y = -x - 17$



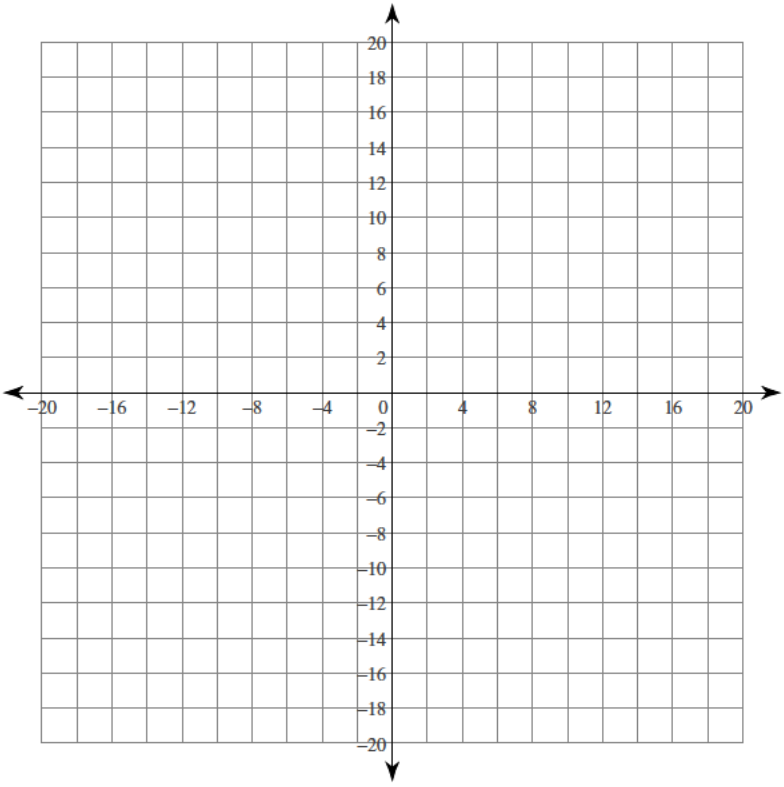
135) $y = \frac{2}{13}x + 7$

$y = \frac{25}{13}x - 16$



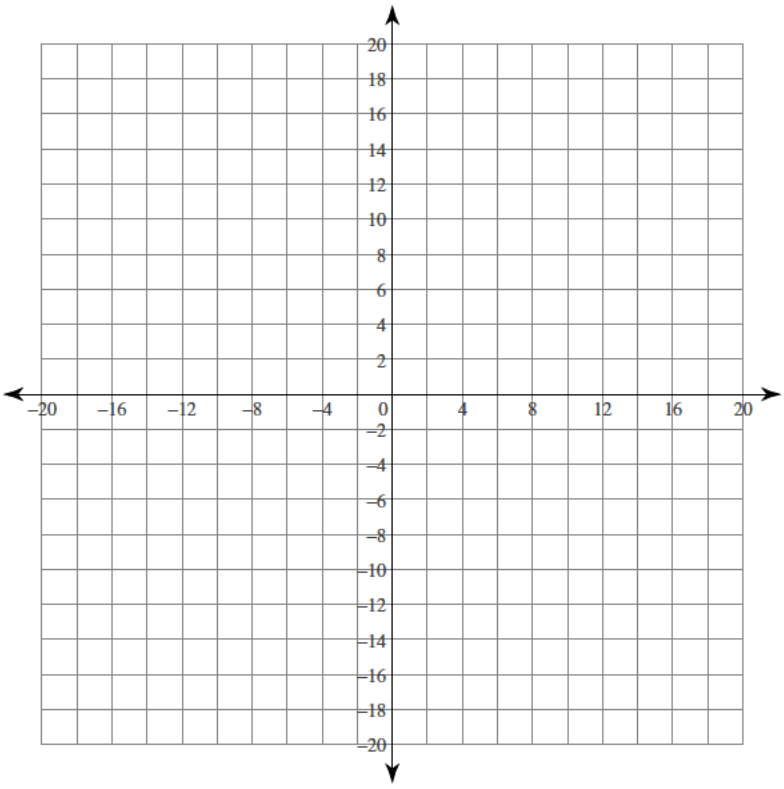
136) $y = \frac{20}{19}x + 9$

$y = \frac{5}{19}x - 6$



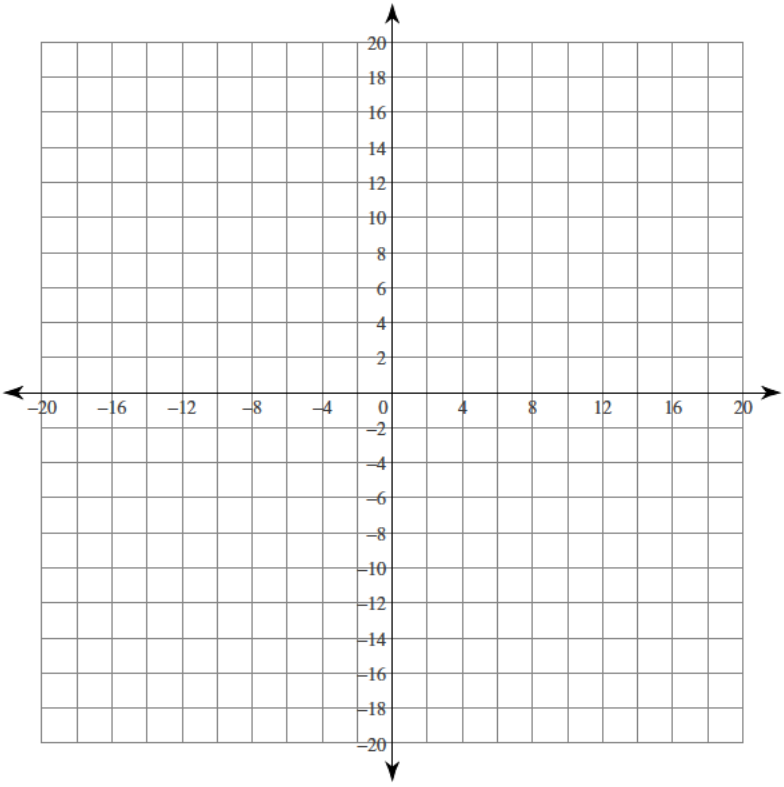
137) $y = -\frac{3}{2}x + 1$

$y = \frac{1}{12}x - 18$



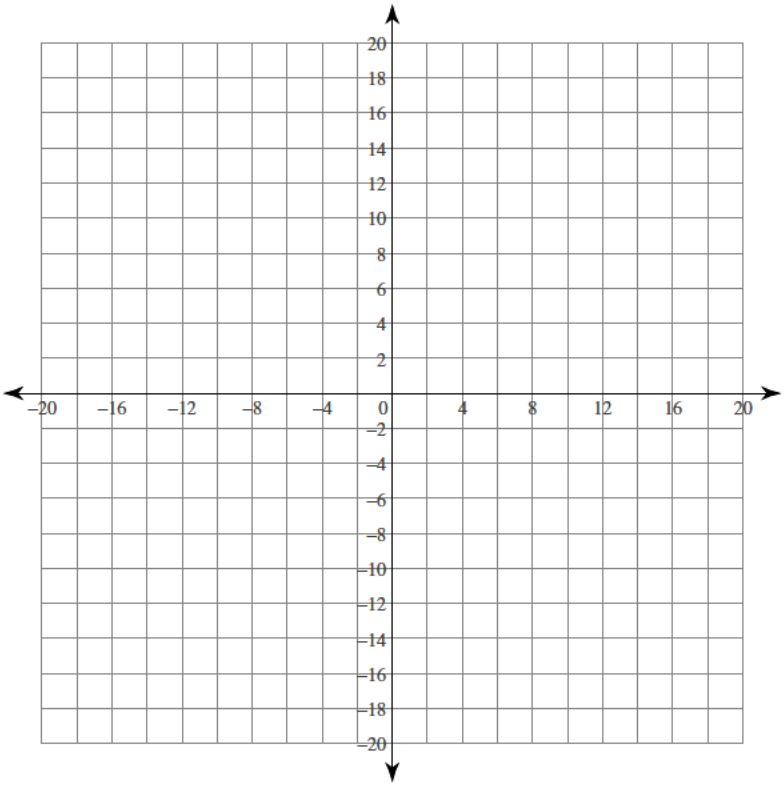
138) $y = -\frac{3}{4}x + 2$

$y = \frac{1}{2}x - 3$



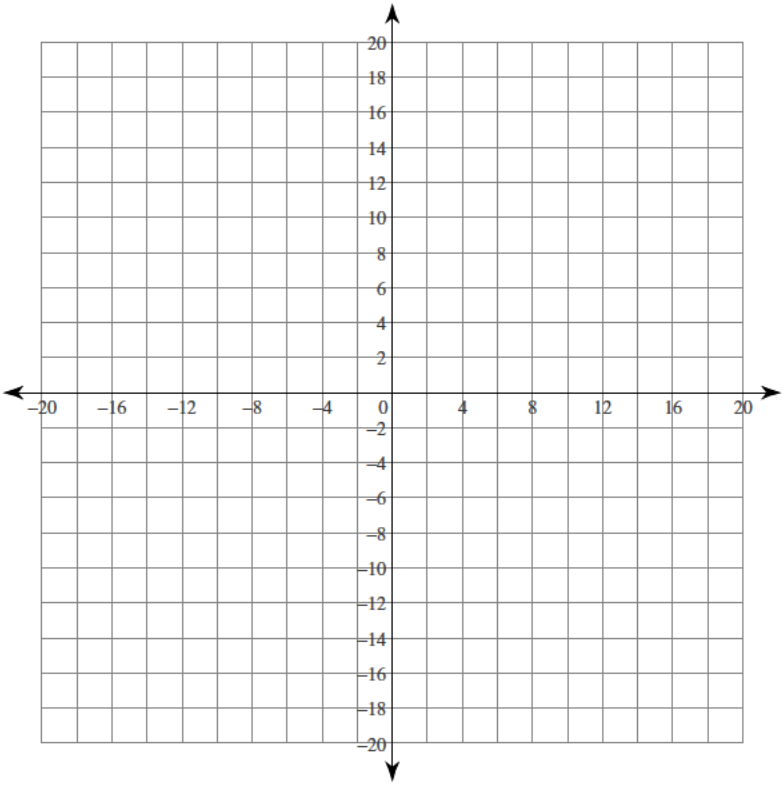
139) $y = \frac{8}{19}x + 4$

$y = -\frac{14}{19}x - 18$



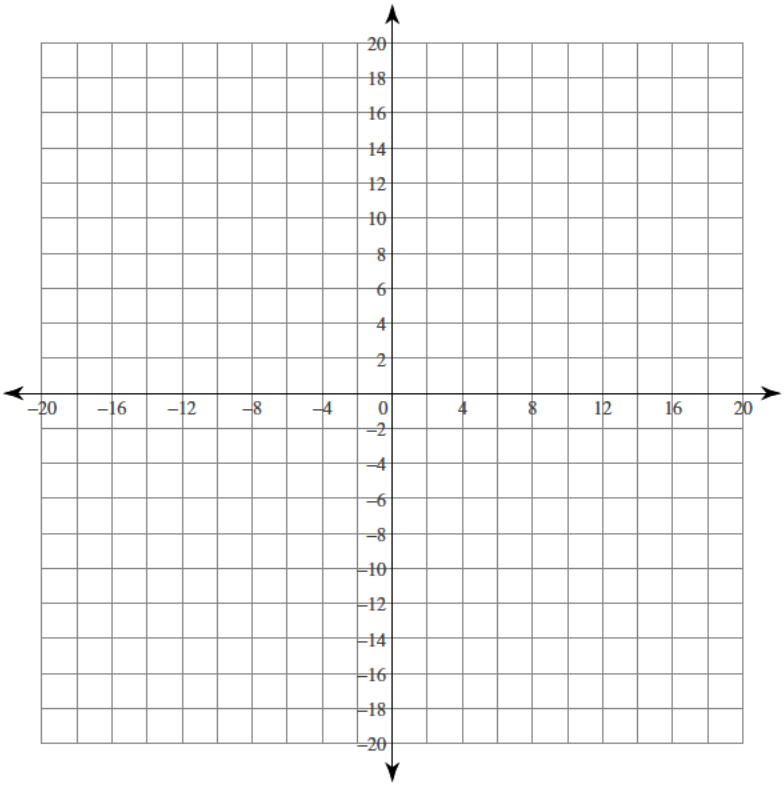
140) $y = -\frac{17}{19}x - 15$

$y = \frac{2}{19}x + 4$



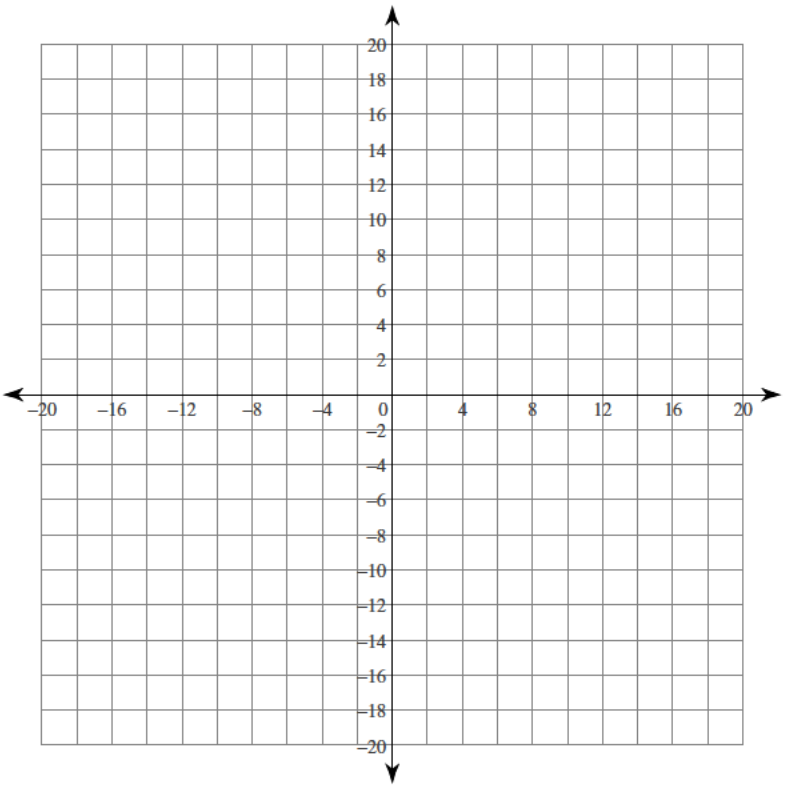
141) $y = \frac{9}{4}x + 2$

$y = \frac{1}{4}x - 6$



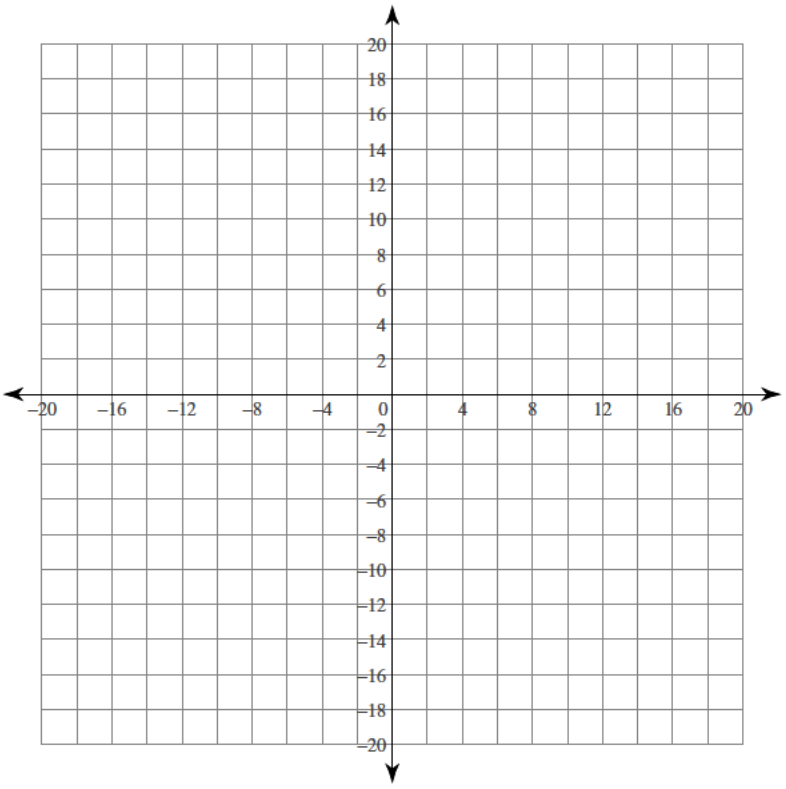
142) $y = \frac{5}{2}x - 4$

$y = -\frac{13}{4}x + 19$



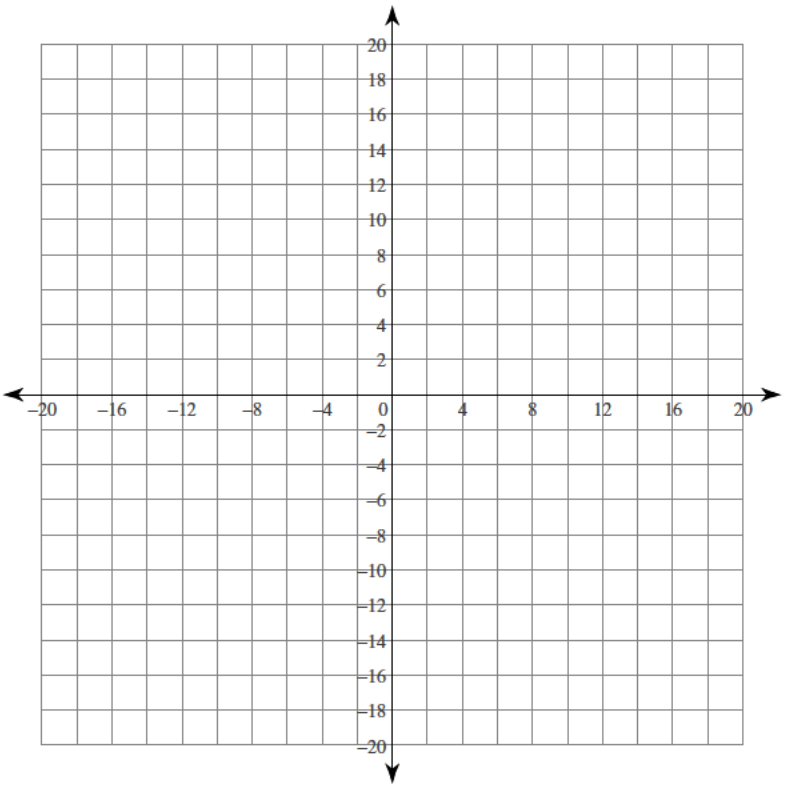
143) $y = -\frac{5}{4}x + 17$

$y = -\frac{5}{4}x - 7$



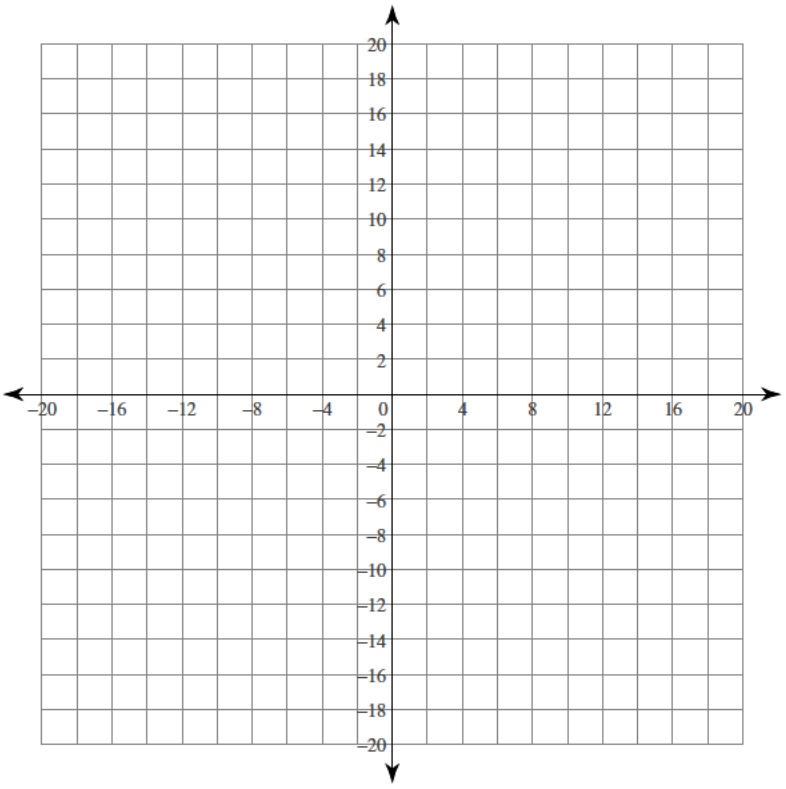
144) $y = \frac{5}{12}x + 14$

$y = -\frac{1}{6}x + 7$



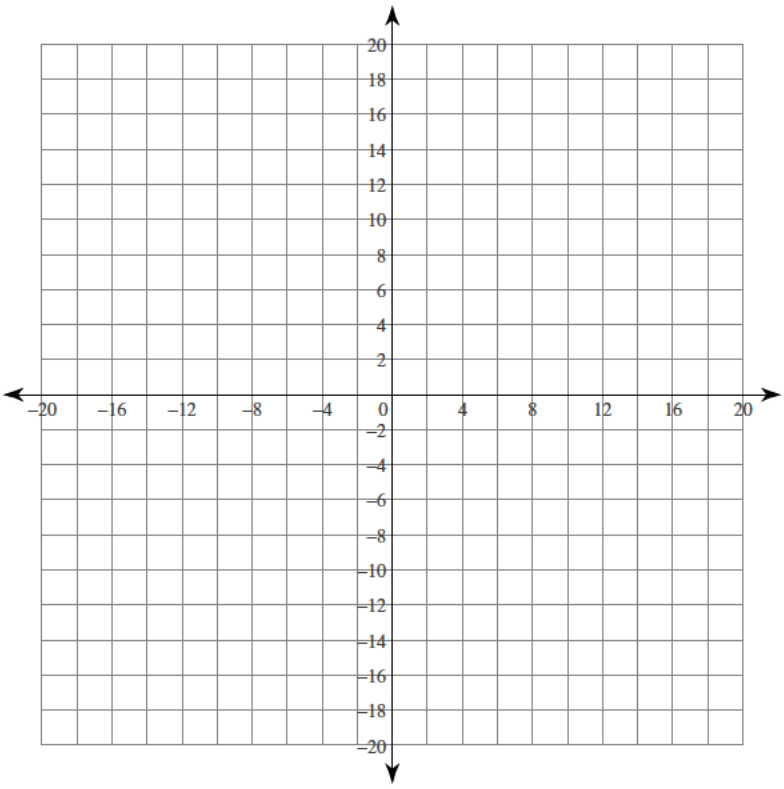
145) $y = -\frac{1}{4}x + 13$

$y = -\frac{1}{4}x - 18$



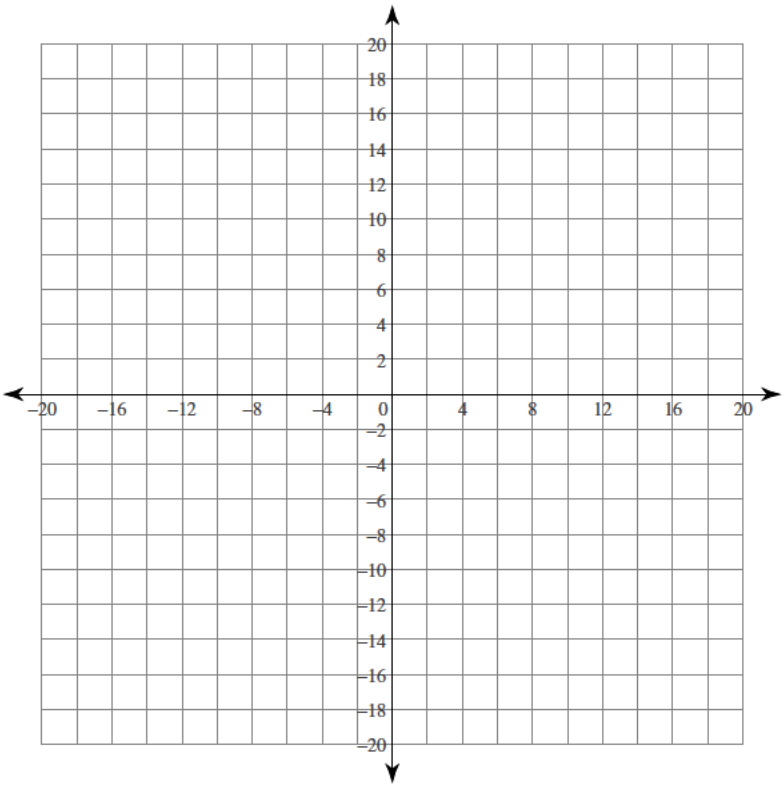
146) $y = \frac{35}{12}x - 16$

$y = \frac{5}{6}x + 9$



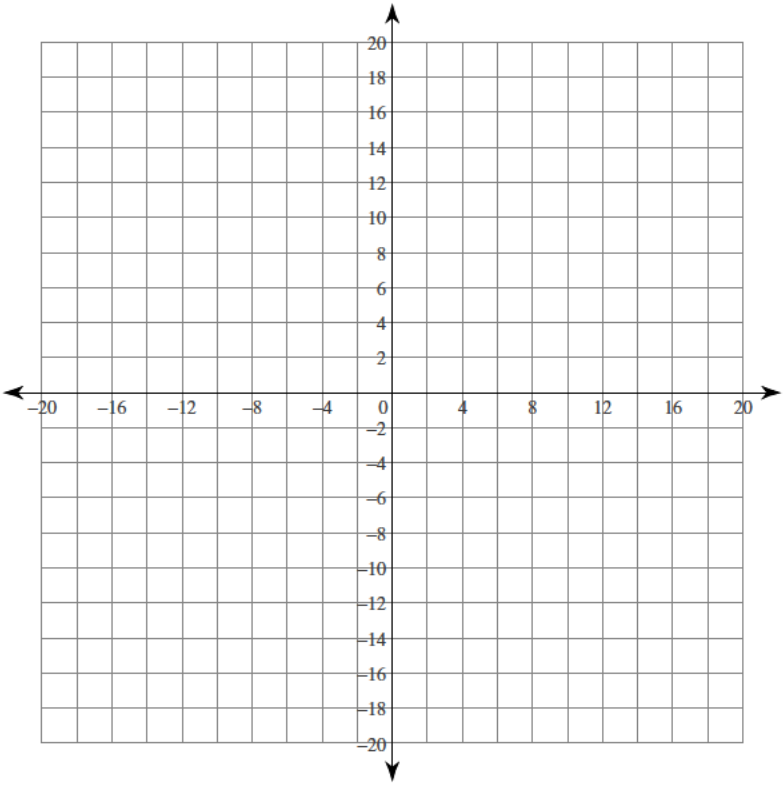
147) $y = -\frac{1}{2}x - 8$

$y = -\frac{3}{2}x + 4$



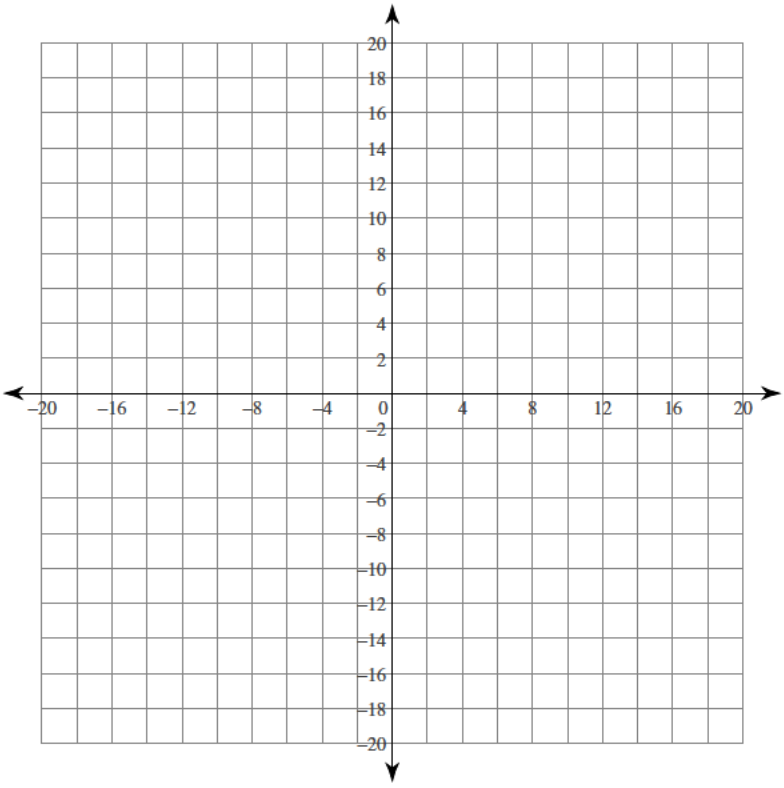
148) $y = \frac{3}{4}x - 7$

$y = \frac{21}{4}x + 11$



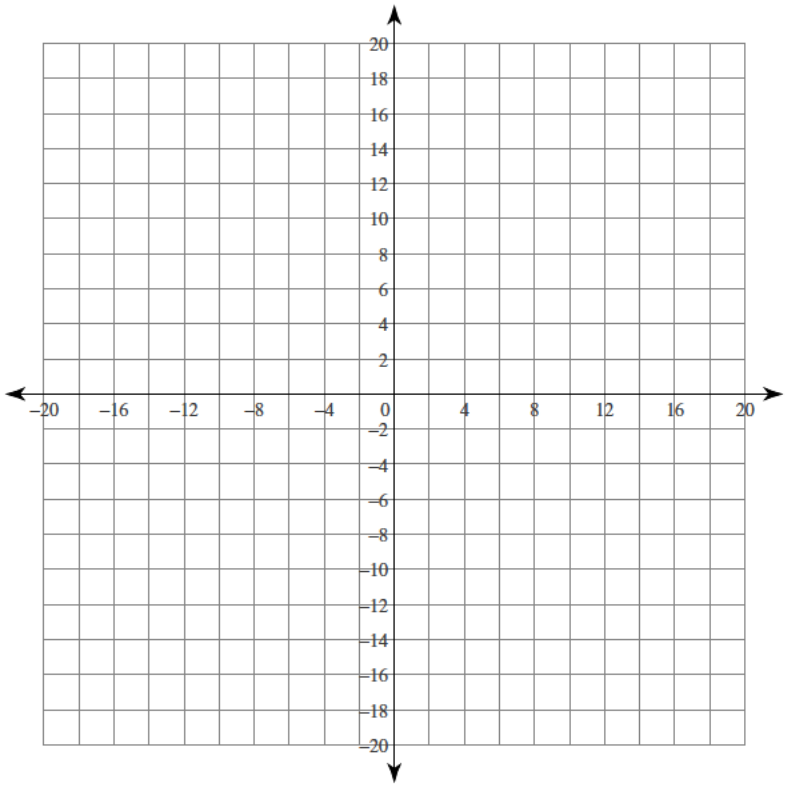
149) $y = -\frac{18}{11}x + 11$

$y = \frac{2}{11}x - 9$



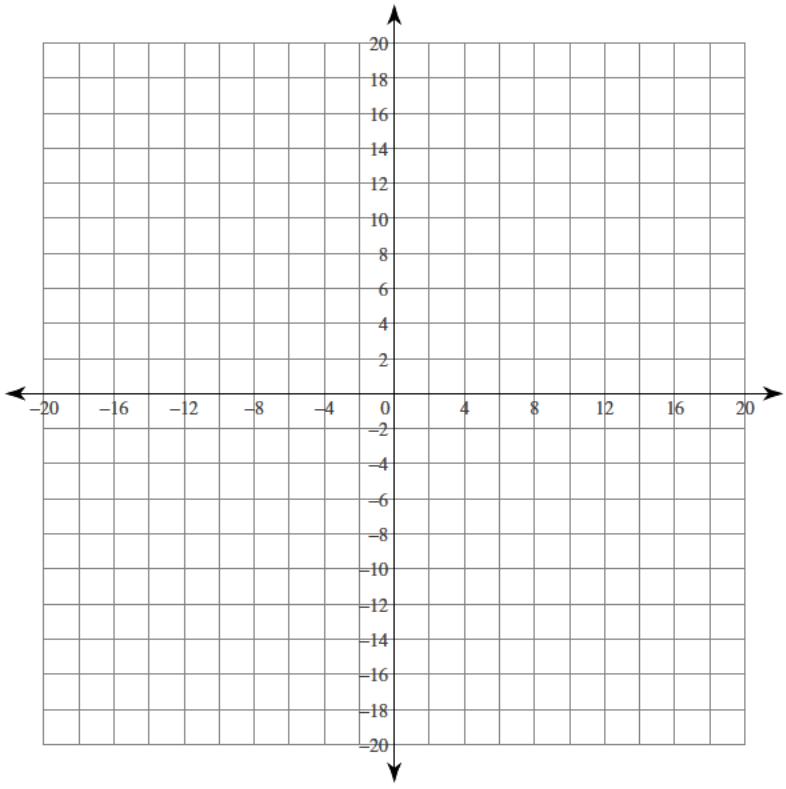
150) $y = -\frac{5}{4}x - 9$

$y = -4$



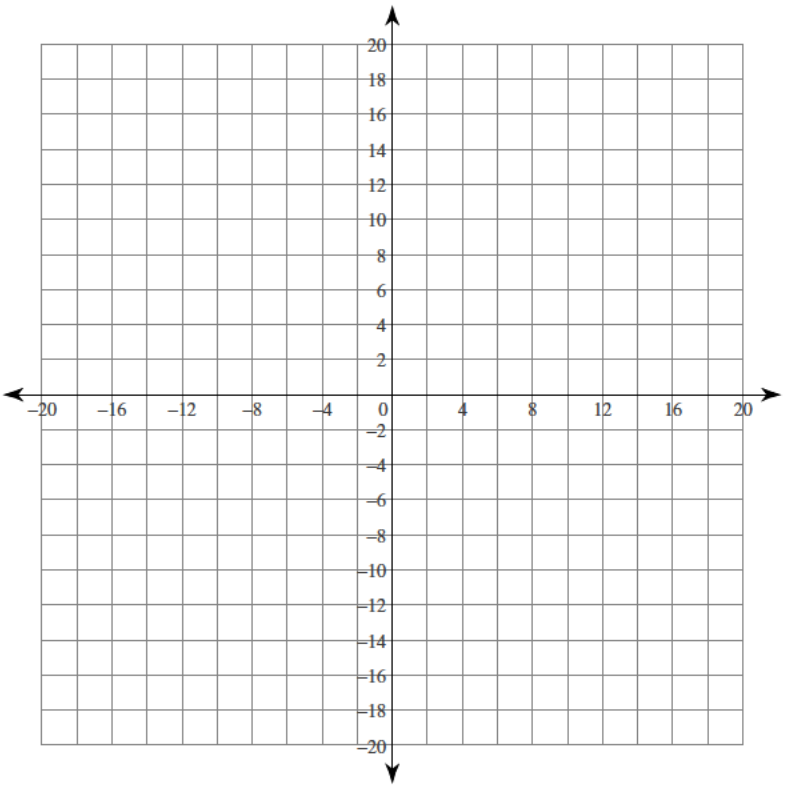
151) $y = \frac{5}{3}x + 3$

$y = \frac{1}{12}x - 16$



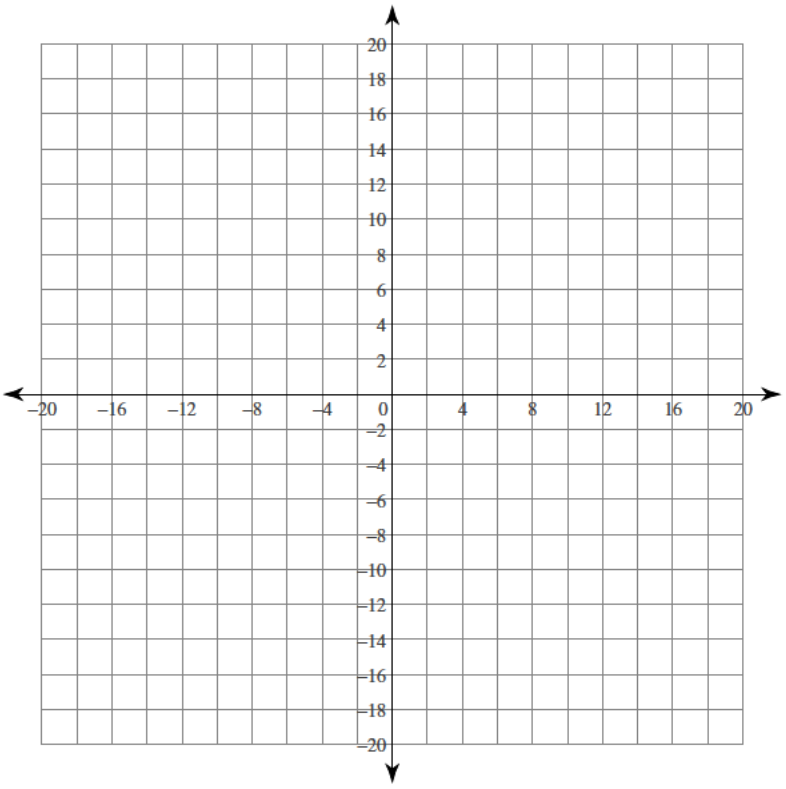
152) $y = \frac{16}{19}x - 17$

$y = -\frac{8}{19}x + 7$



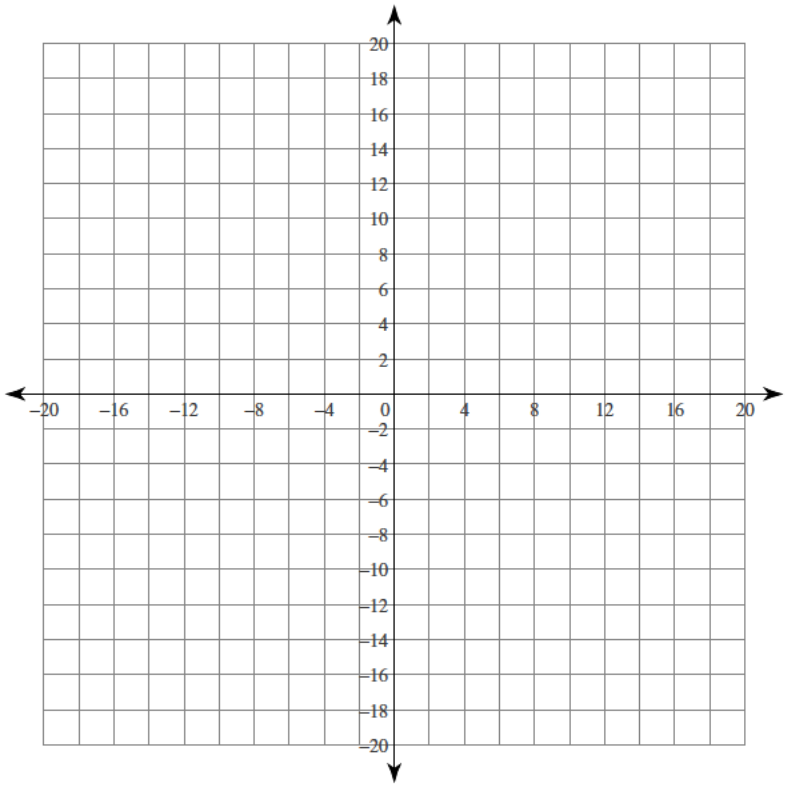
153) $y = \frac{25}{19}x - 19$

$y = -\frac{5}{19}x + 11$



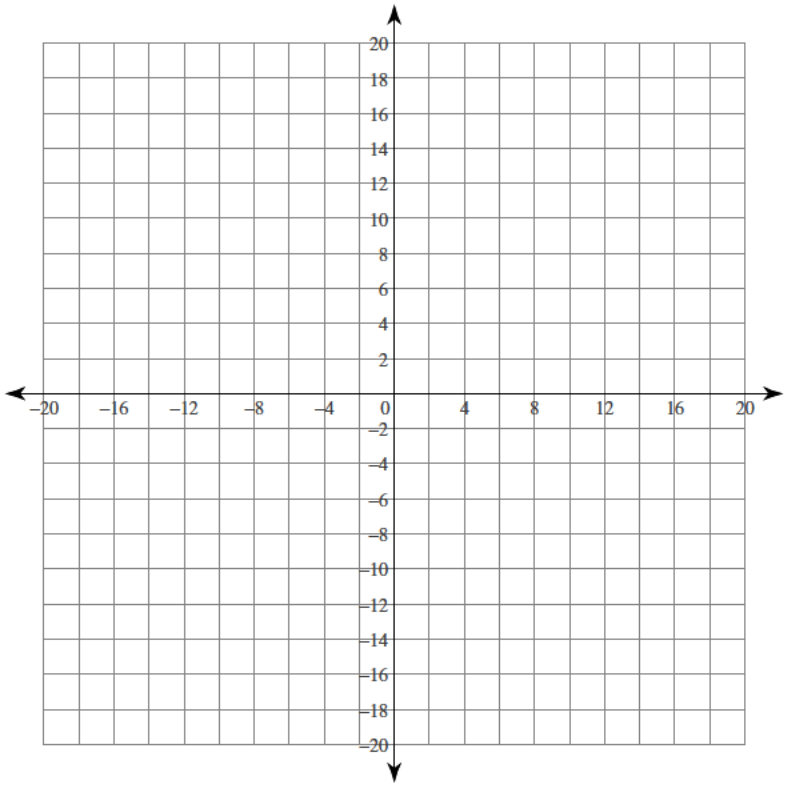
154) $y = \frac{3}{4}x + 6$

$y = -3x - 9$



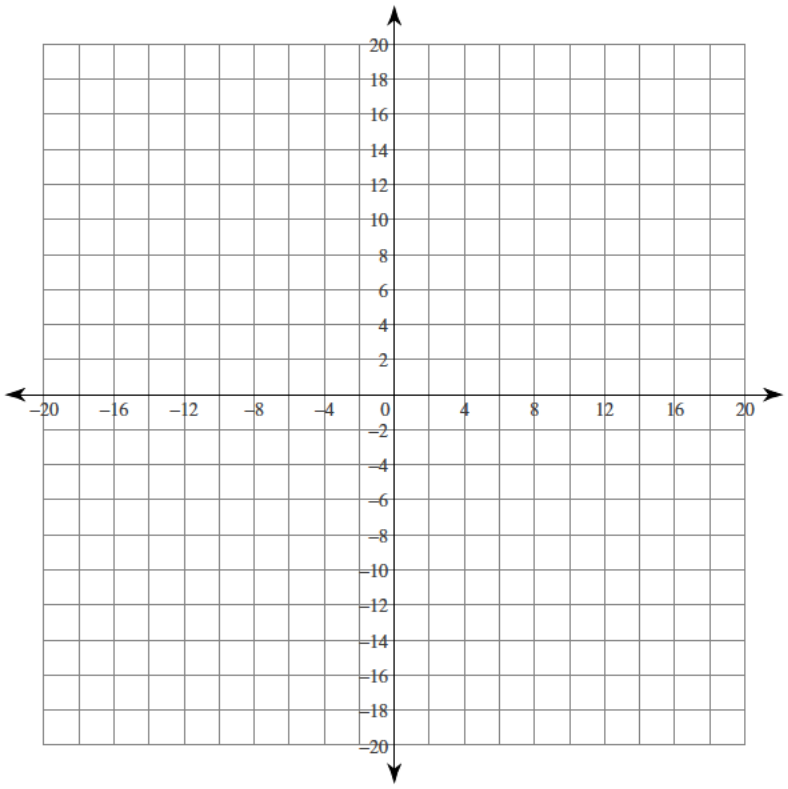
155) $y = -\frac{1}{3}x + 10$

$y = -\frac{1}{3}x + 7$



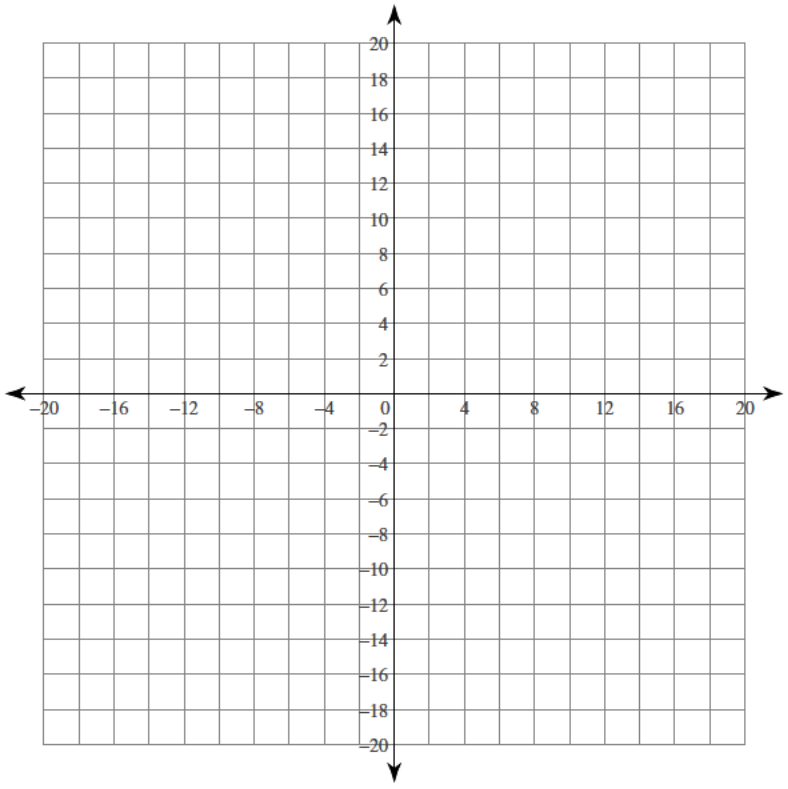
156) $y = \frac{22}{19}x - 10$

$y = \frac{22}{19}x - 5$



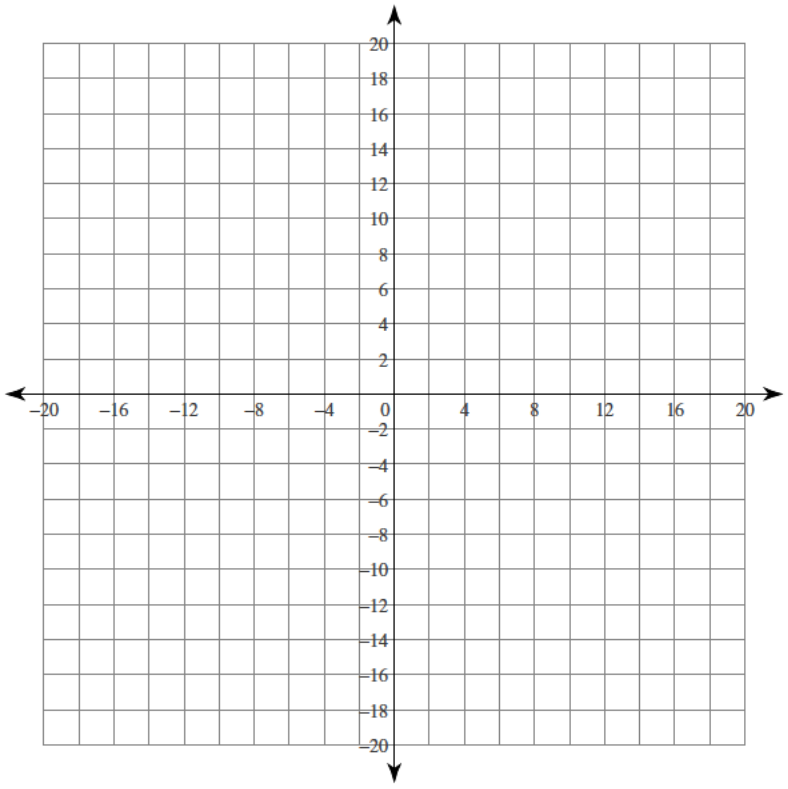
157) $y = 2x + 10$

$y = -\frac{1}{3}x + 17$



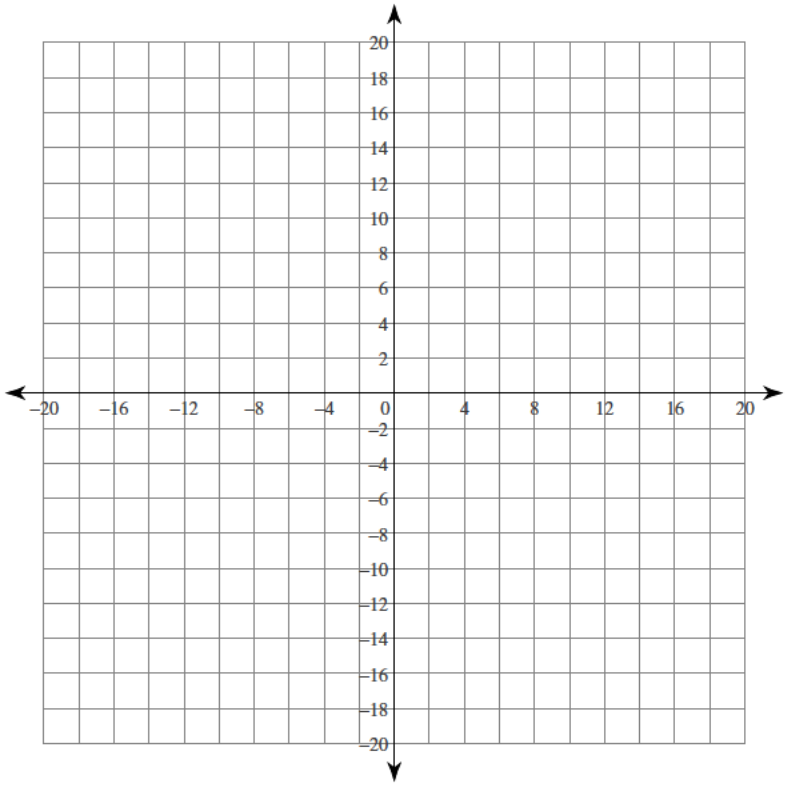
158) $y = -\frac{5}{3}x - 1$

$y = 19$



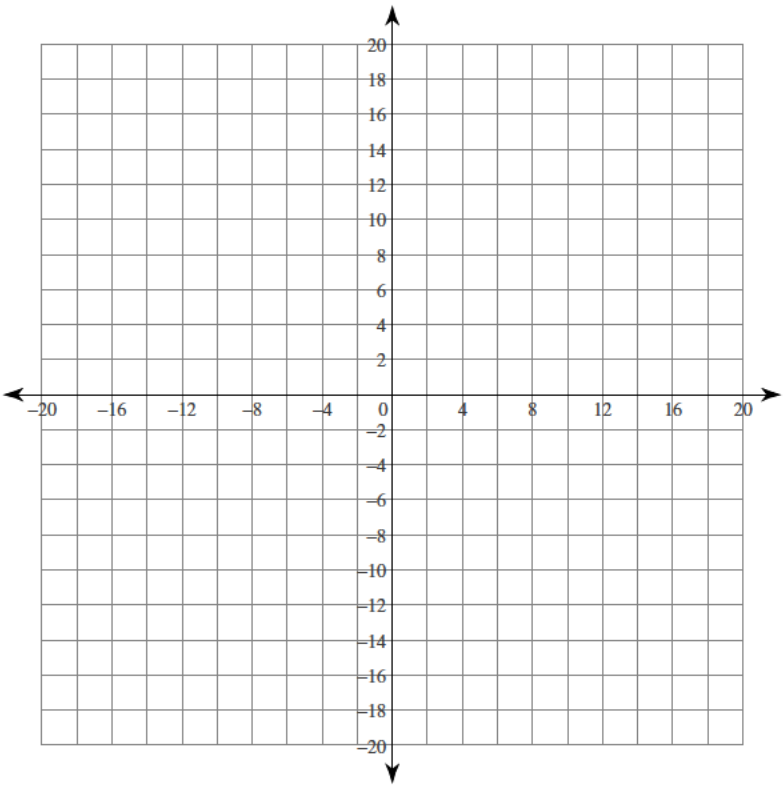
159) $y = -\frac{8}{11}x - 9$

$y = -17$



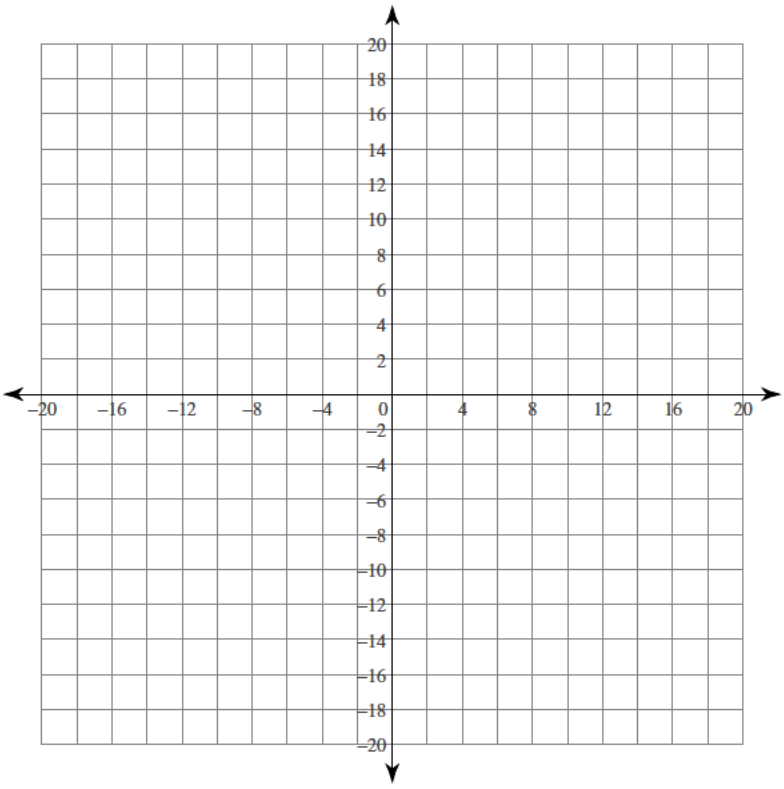
160) $y = \frac{1}{11}x - 11$

$y = -\frac{14}{11}x + 4$



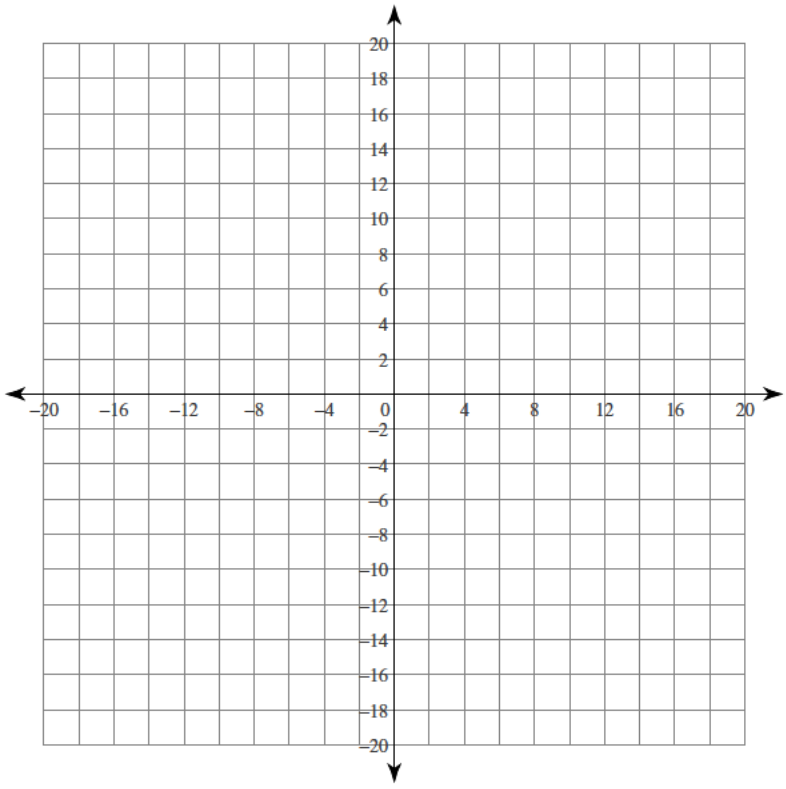
161) $y = \frac{30}{13}x + 17$

$y = \frac{6}{13}x - 7$



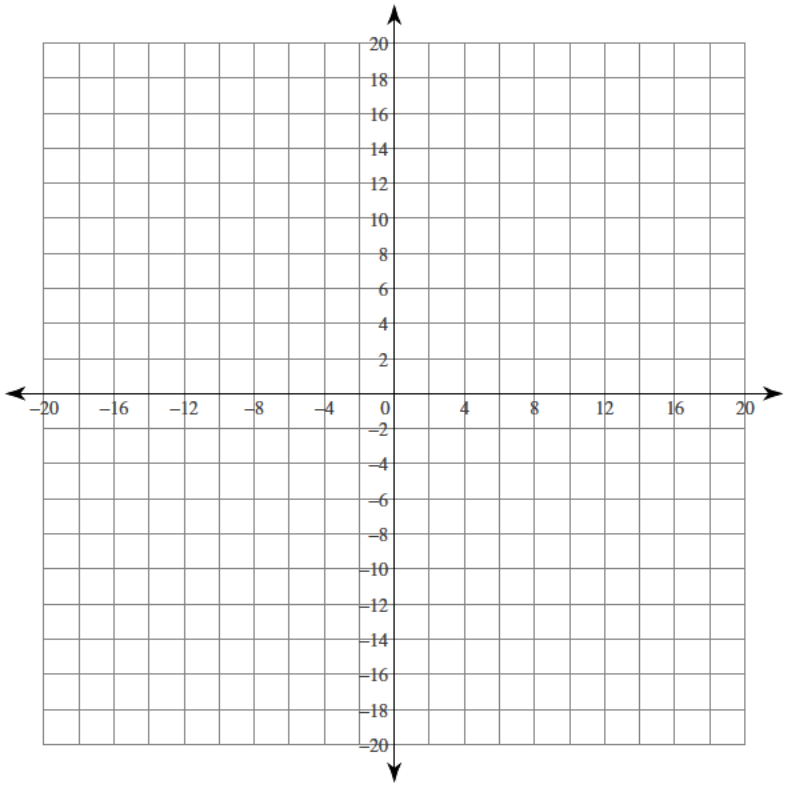
162) $y = \frac{9}{11}x - 13$

$y = -2x + 18$



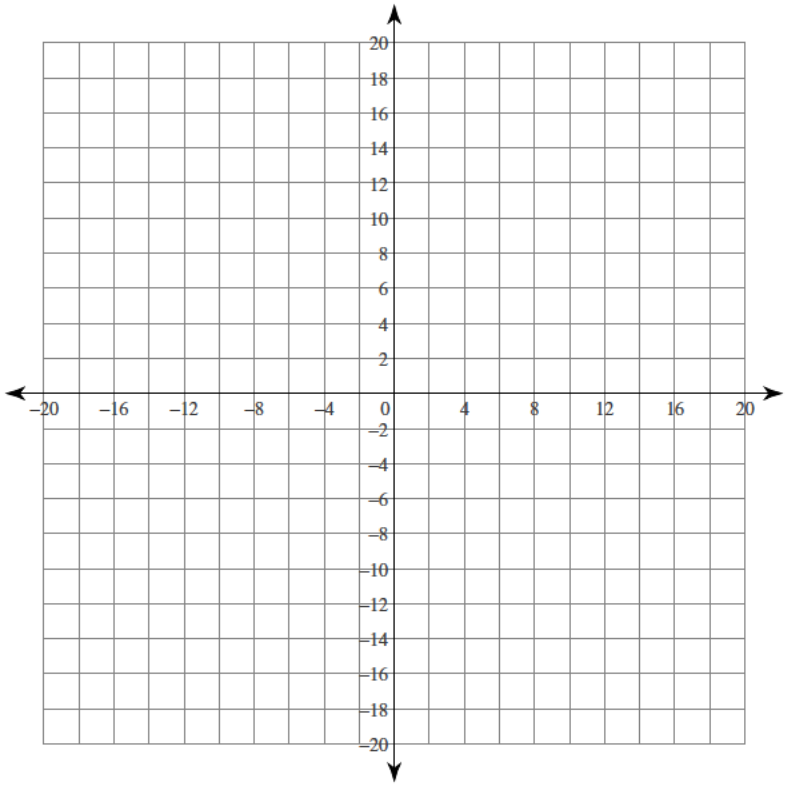
163) $y = \frac{14}{5}x + 7$

$y = -\frac{2}{5}x - 9$



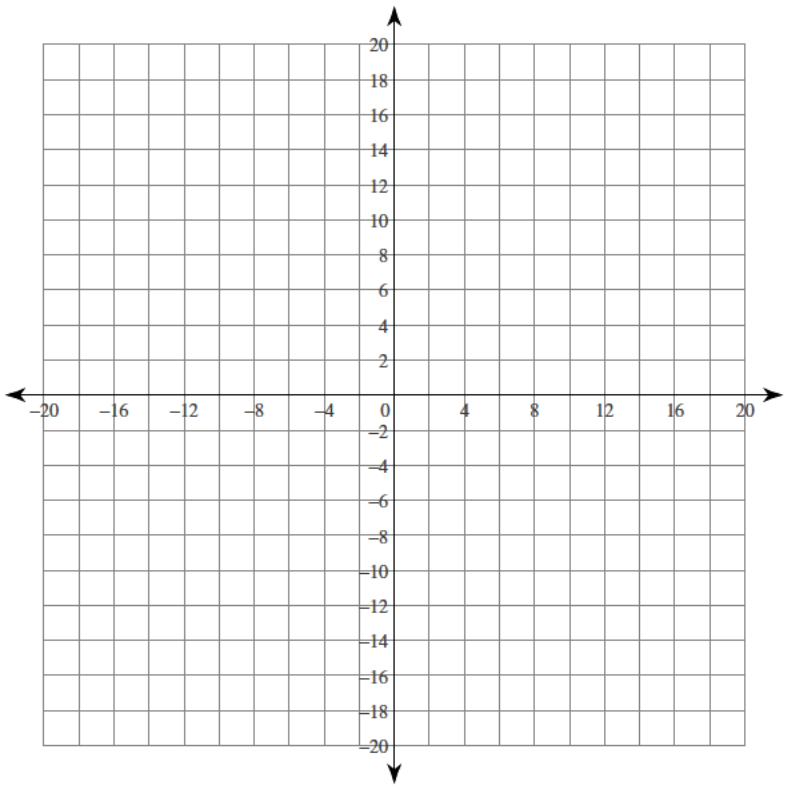
164) $y = -2x - 4$

$y = -2x - 19$



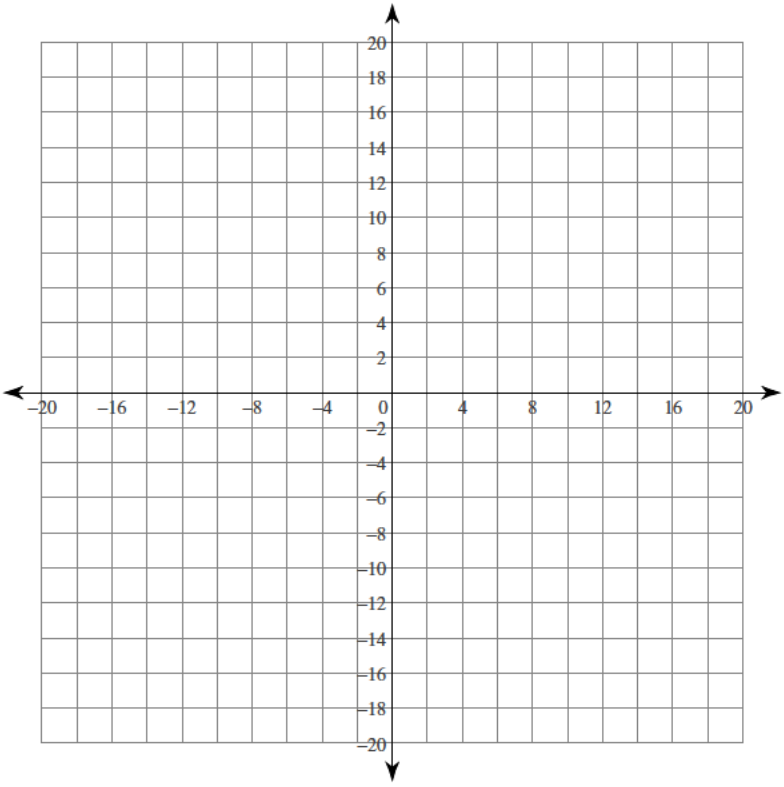
165) $y = -\frac{13}{18}x + 16$

$y = \frac{1}{2}x - 6$



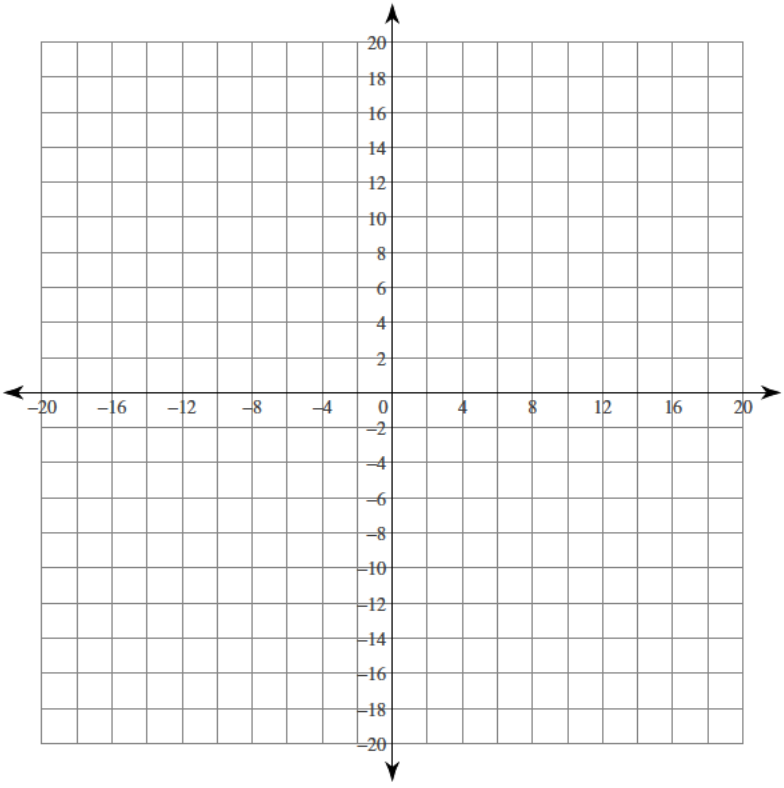
166) $y = \frac{7}{18}x + 2$

$y = \frac{25}{18}x - 16$



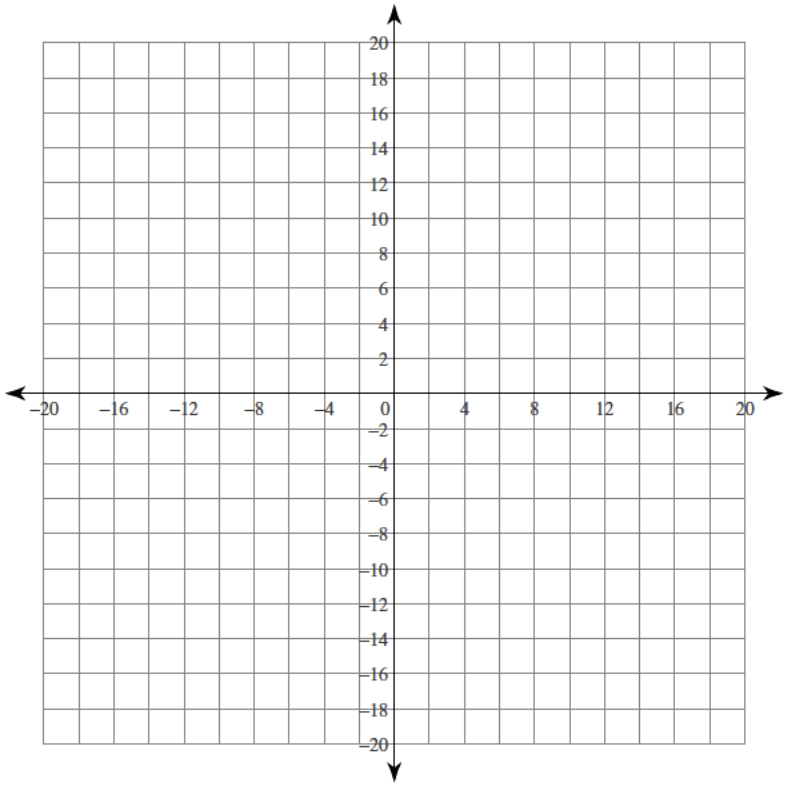
167) $y = 2x - 9$

$y = -\frac{21}{2}x + 16$



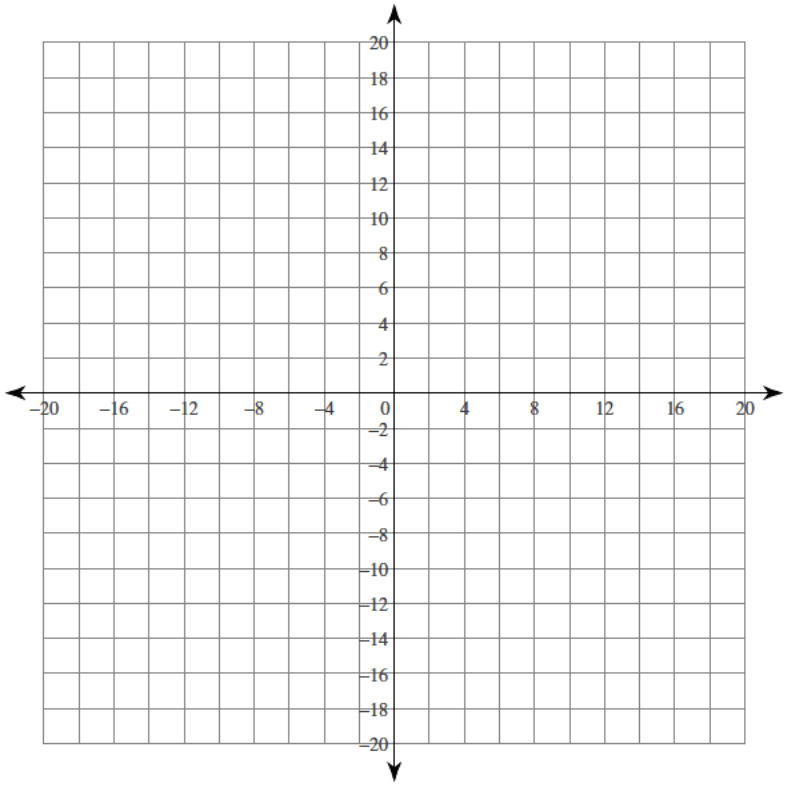
168) $y = x + 10$

$y = 8x - 11$



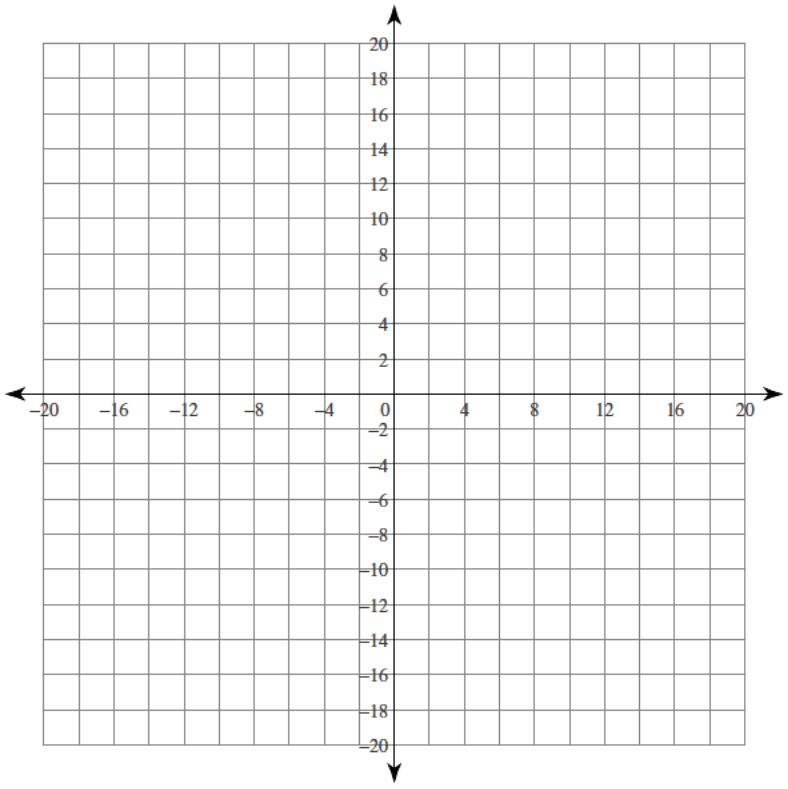
169) $y = -\frac{1}{6}x + 19$

$y = \frac{11}{9}x - 6$



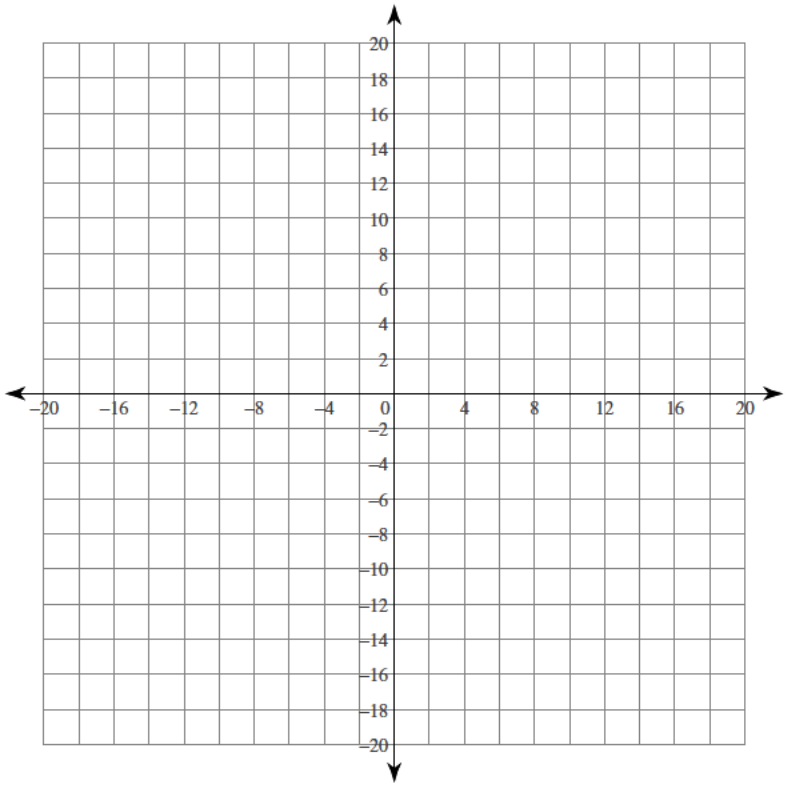
170) $y = -\frac{5}{2}x - 8$

$y = x - 15$



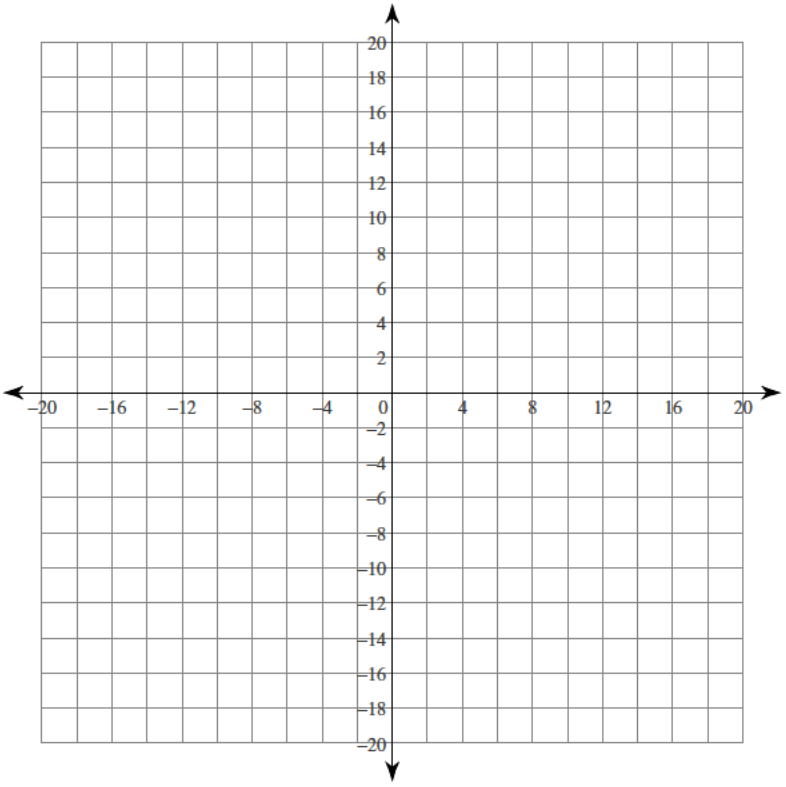
171) $y = \frac{3}{13}x - 7$

$y = \frac{14}{13}x + 4$



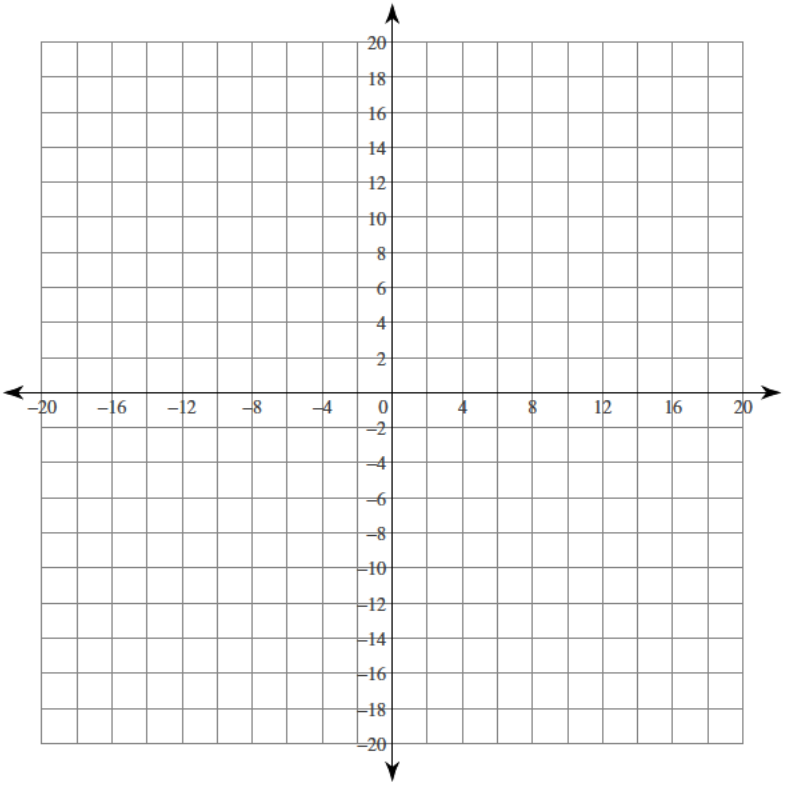
172) $y = \frac{30}{13}x + 13$

$y = -\frac{2}{13}x - 19$

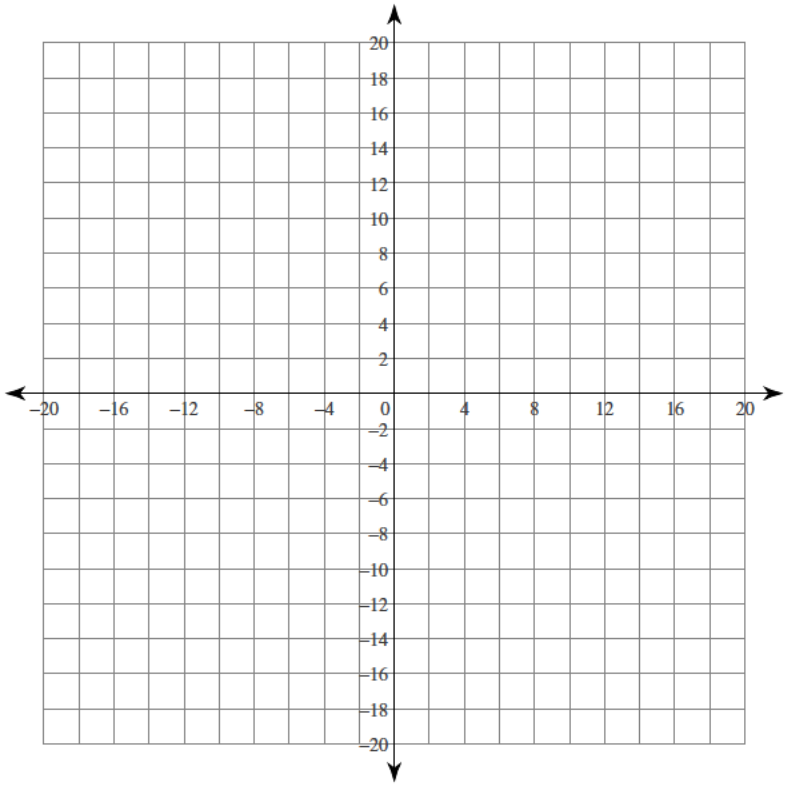


173) $y = -x + 3$

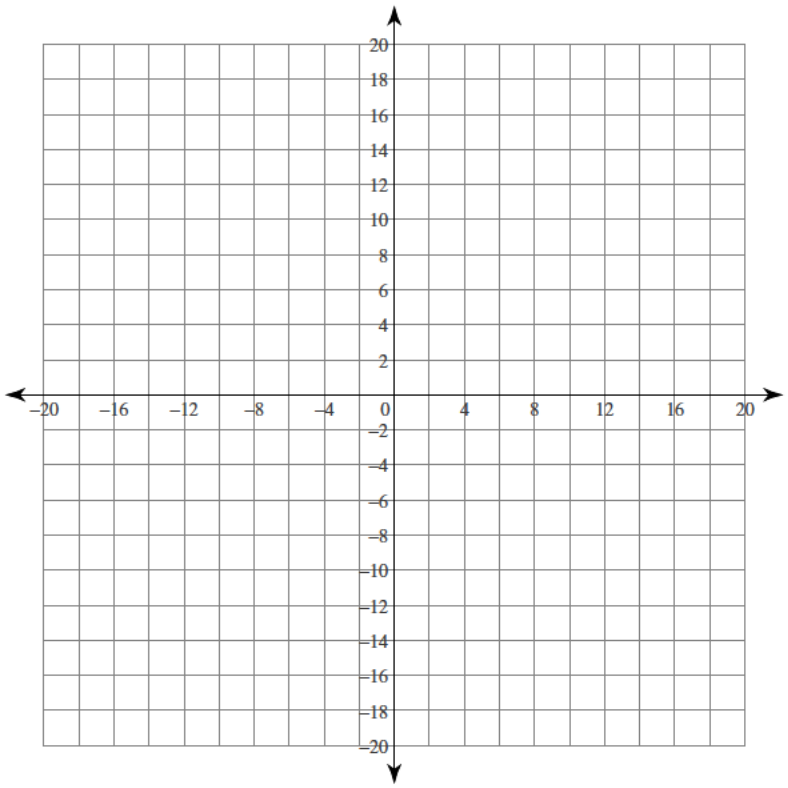
$y = \frac{1}{10}x - 8$



174) $y = -x - 17$
$y = x + 11$

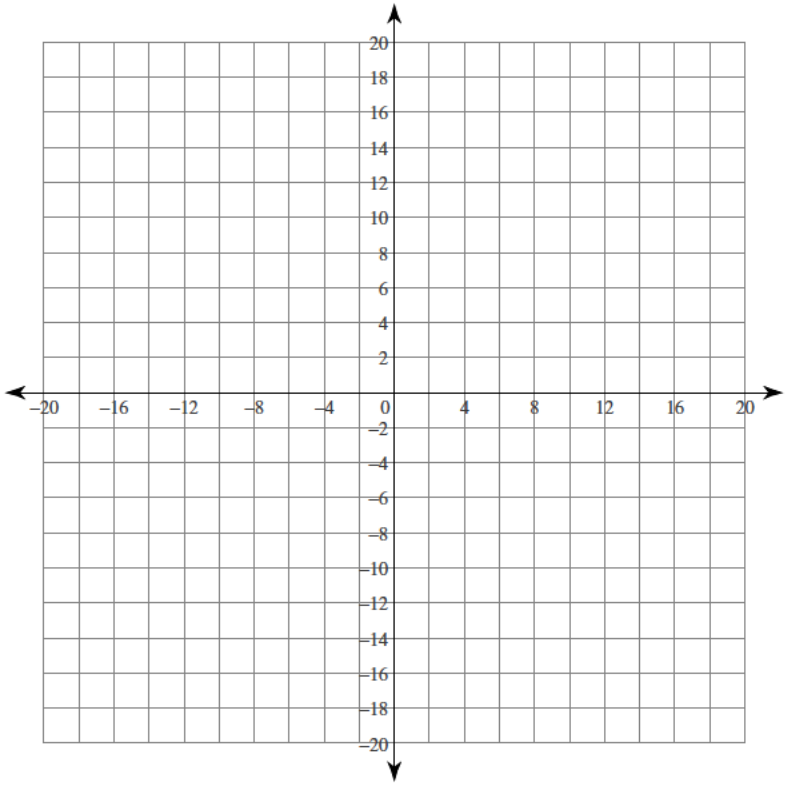


175) $y = x - 1$
$x = 11$



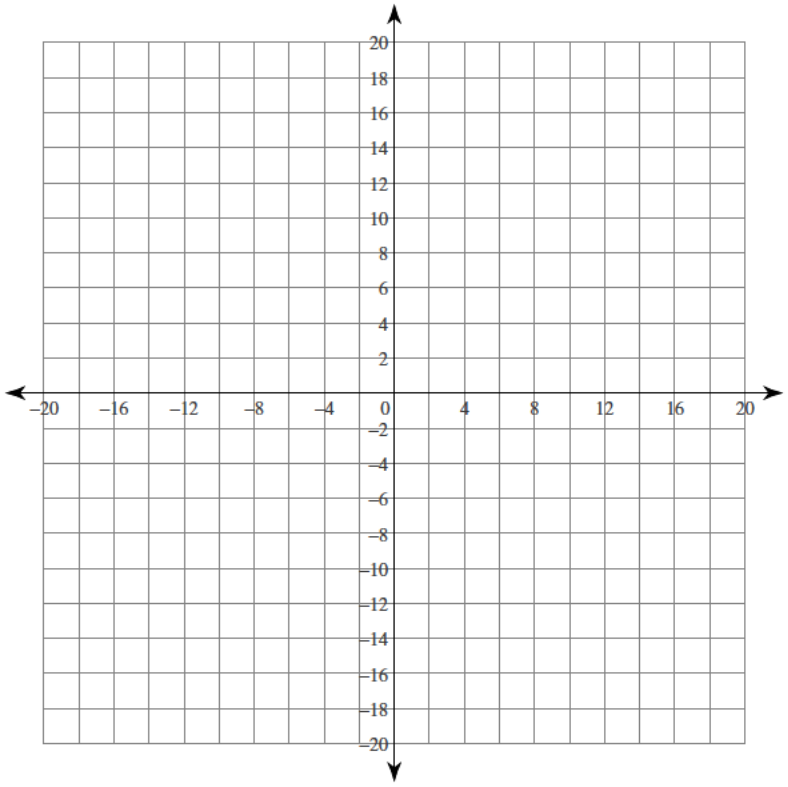
176) $y = \frac{3}{2}x + 12$

$y = \frac{3}{2}x - 14$



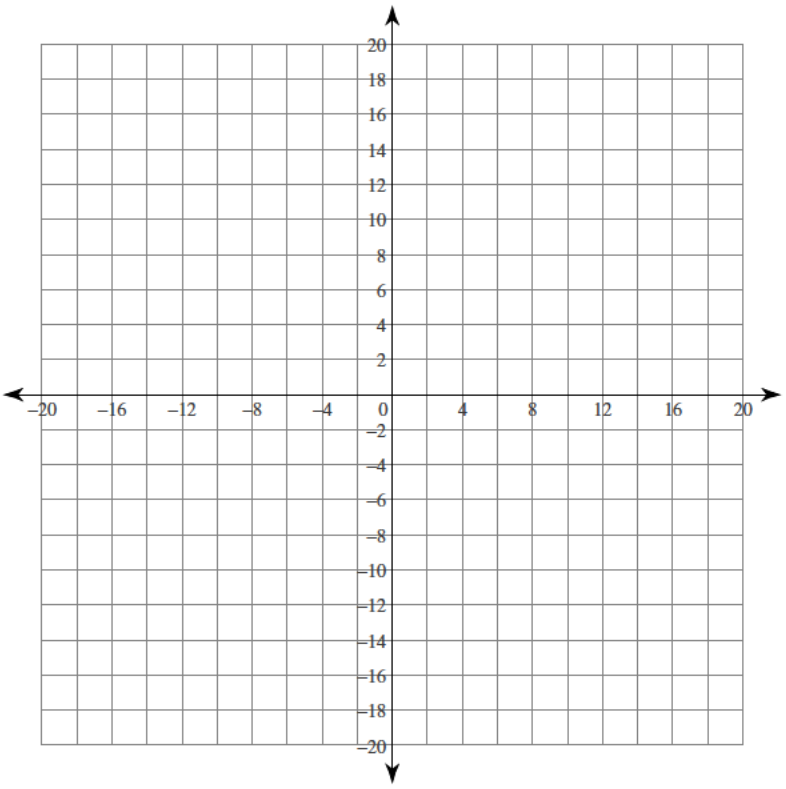
177) $y = 16x - 13$

$y = 19$



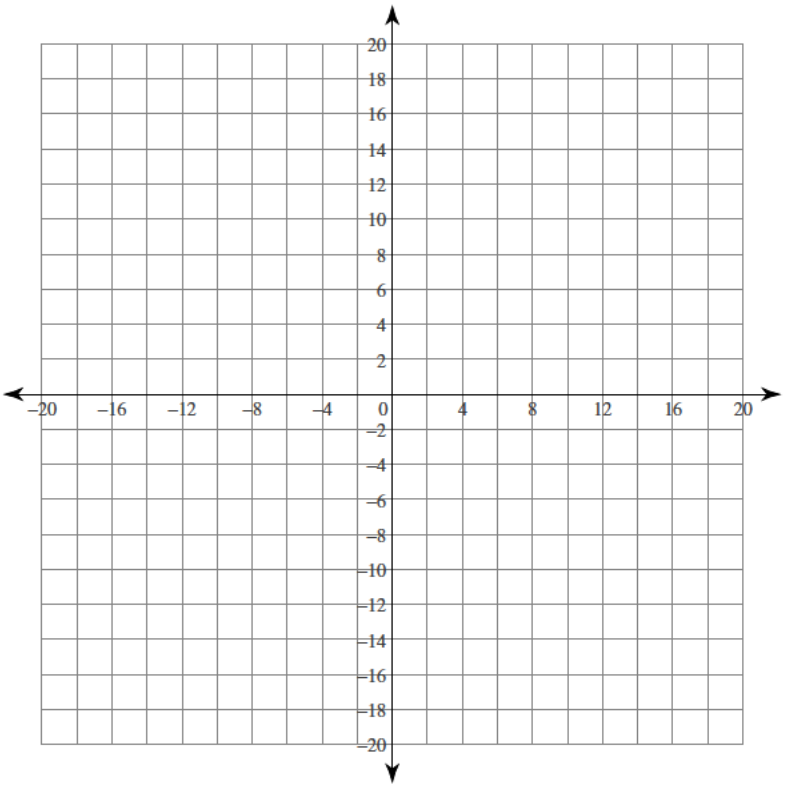
178) $y = \frac{7}{5}x - 8$

$y = -\frac{7}{10}x + 13$



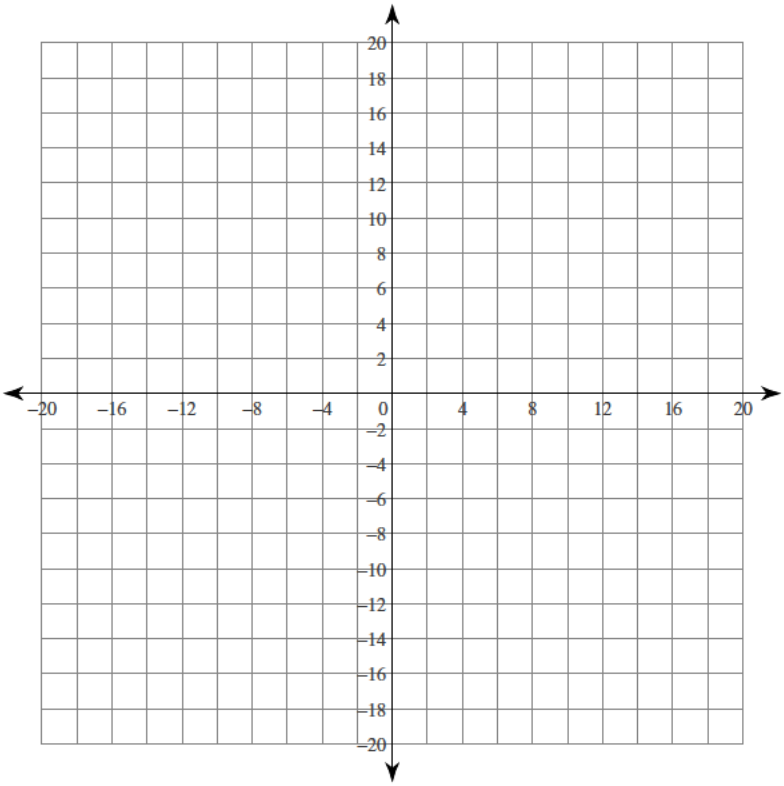
179) $y = -\frac{17}{6}x - 7$

$y = \frac{5}{6}x + 15$



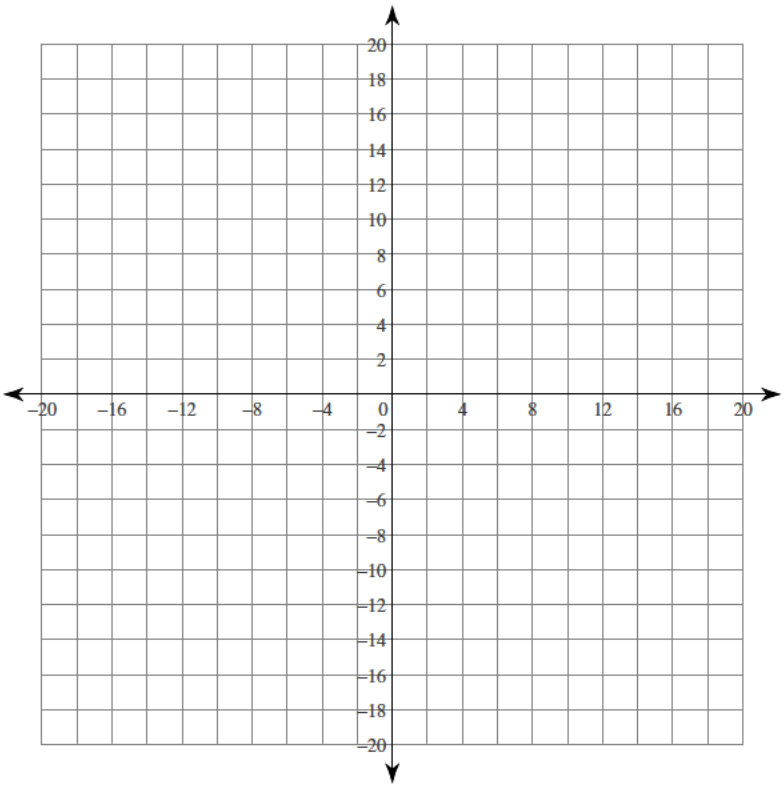
180) $y = -7x - 2$

$y = -7x - 17$



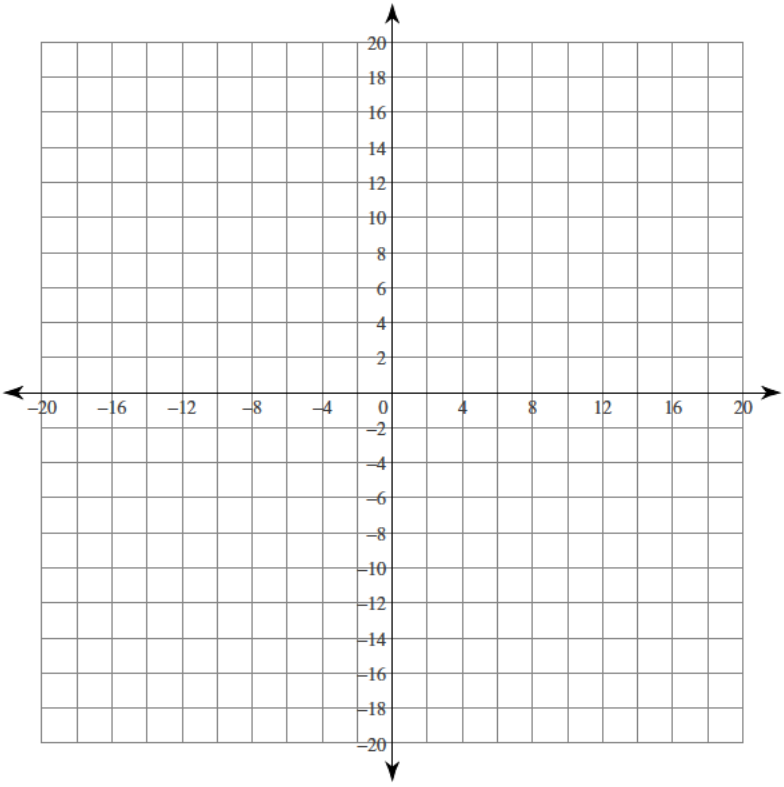
181) $y = -3x - 2$

$y = -\frac{1}{6}x + 15$



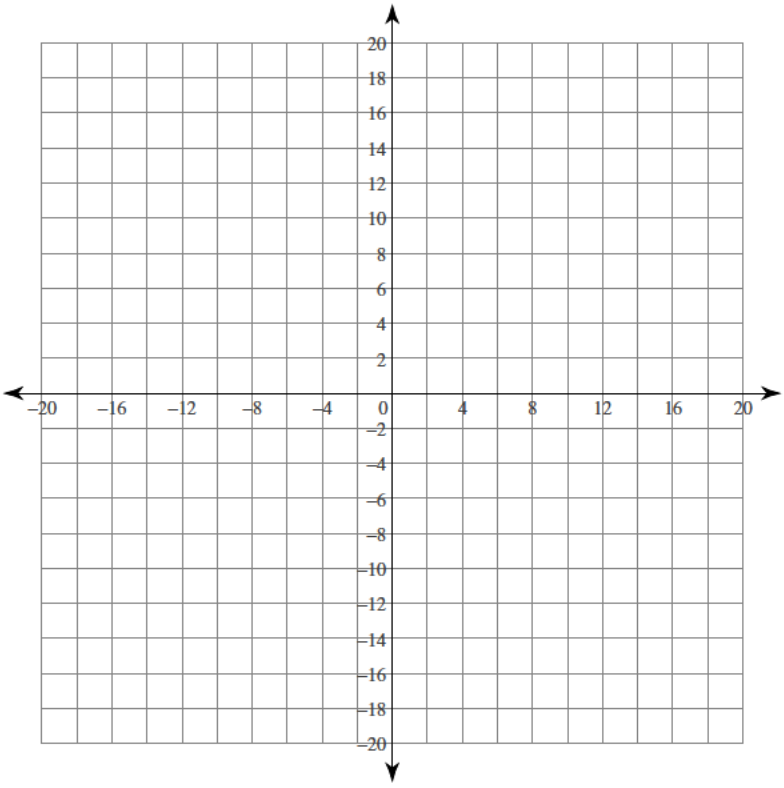
182) $y = \frac{29}{17}x - 10$

$y = \frac{3}{17}x + 16$



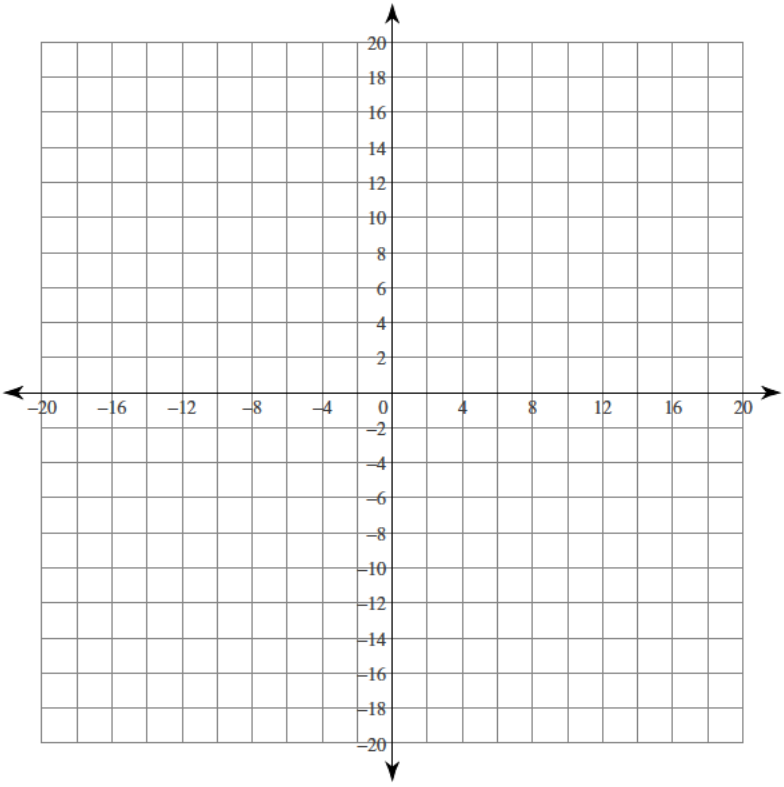
183) $y = -\frac{8}{17}x - 5$

$y = -\frac{25}{17}x + 12$



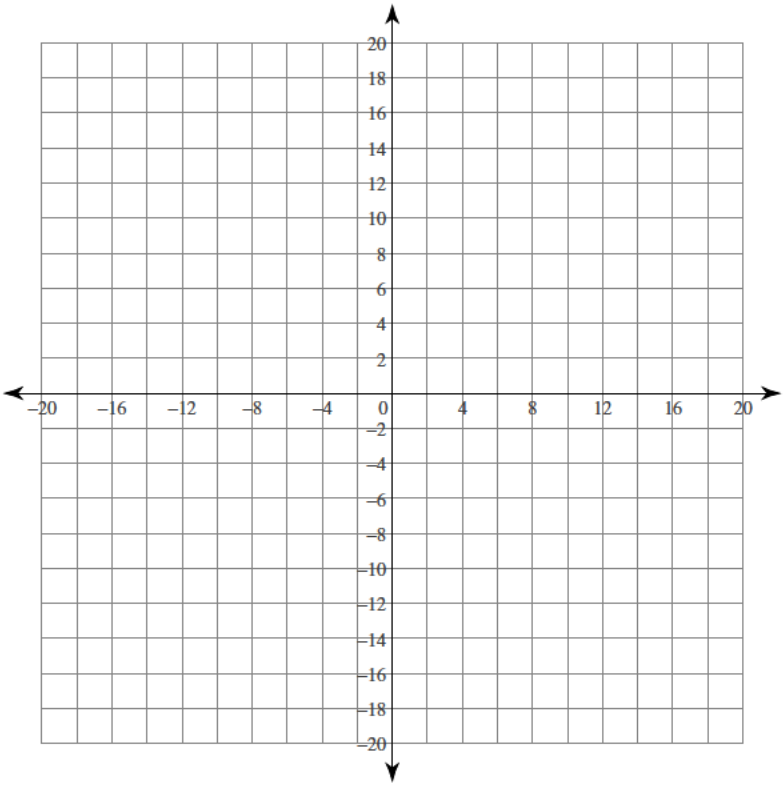
184) $y = \frac{1}{2}x - 11$

$y = -\frac{7}{2}x - 3$



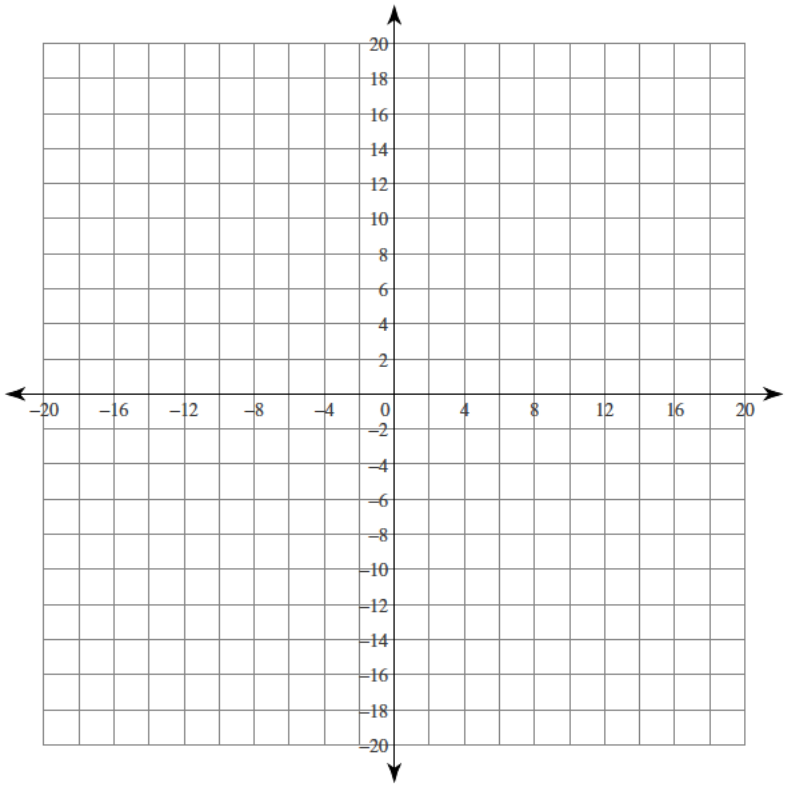
185) $y = \frac{13}{9}x - 13$

$y = \frac{1}{9}x + 11$



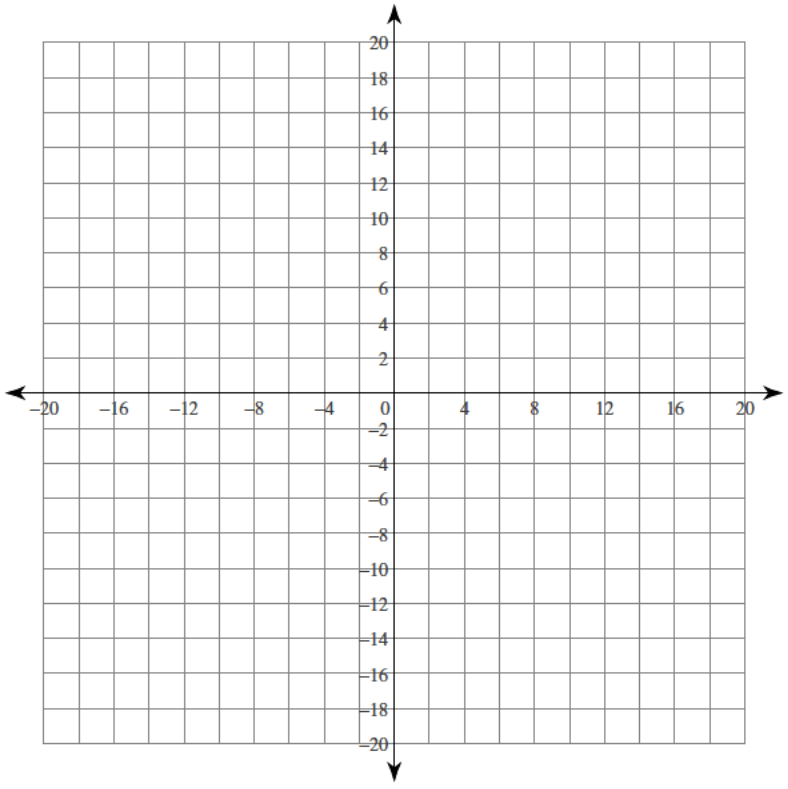
186) $y = x + 7$

$y = -\frac{4}{7}x - 15$



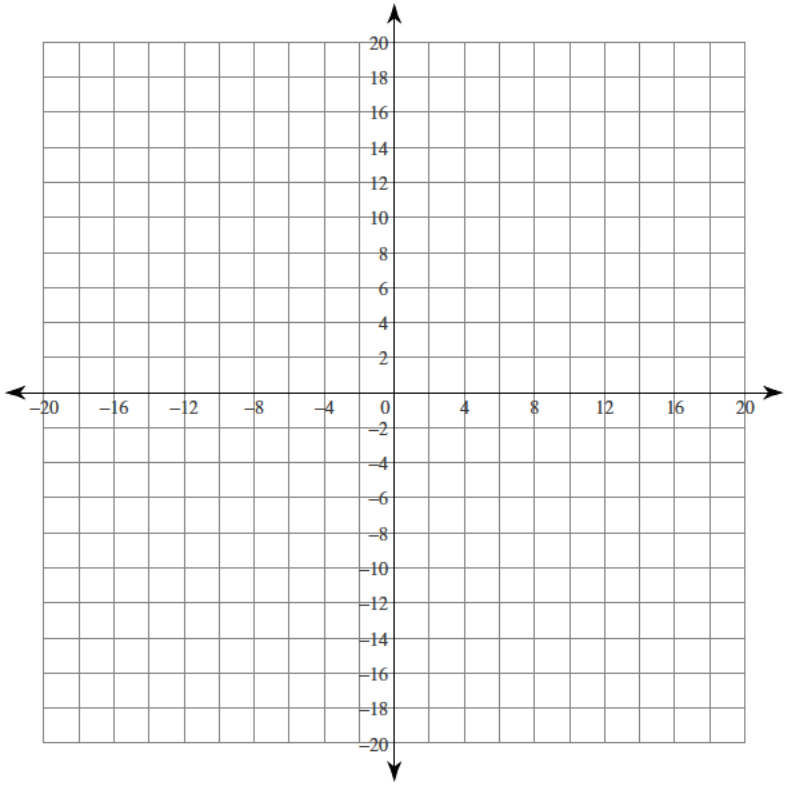
187) $x = 9$

$y = \frac{16}{9}x - 13$



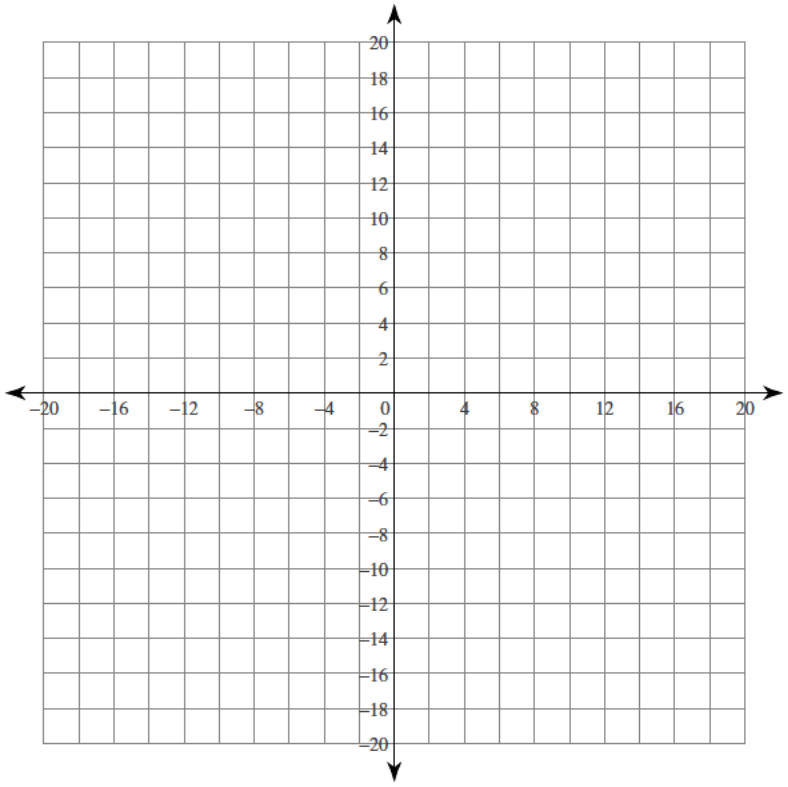
188) $y = -\frac{10}{7}x - 13$

$y = \frac{1}{2}x + 14$



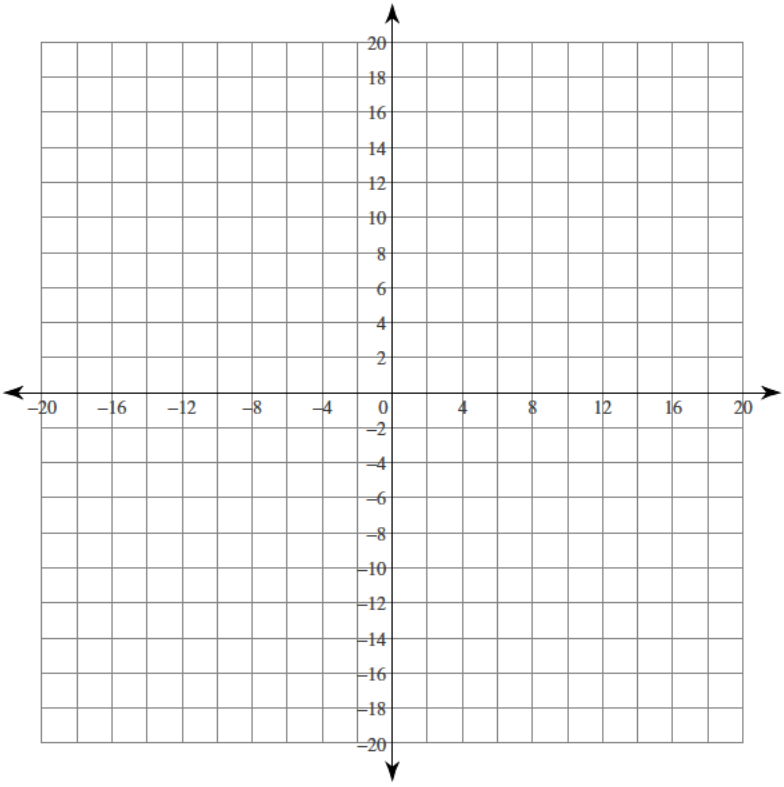
189) $y = -x - 2$

$y = -5x + 2$



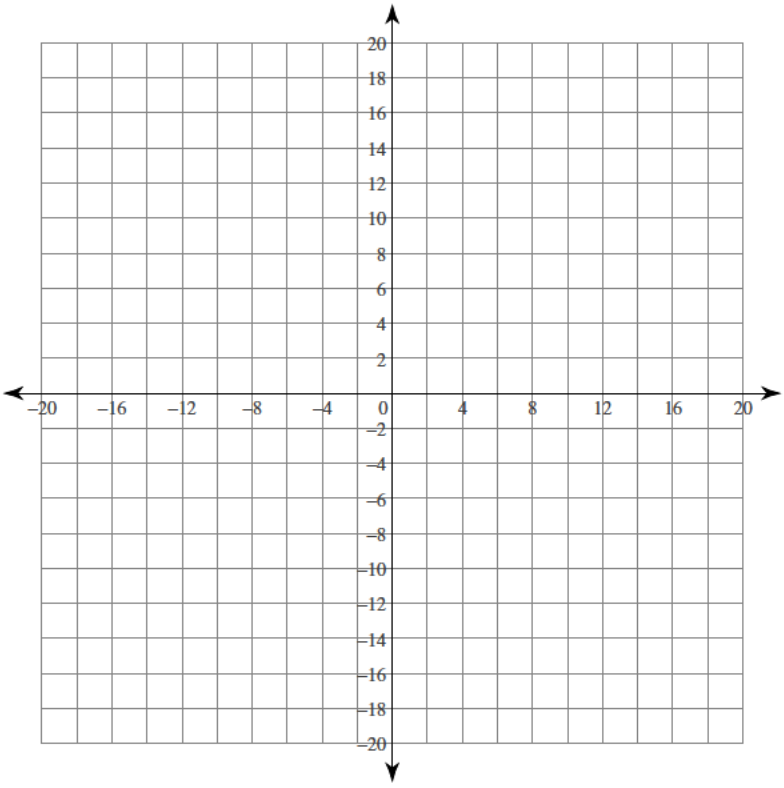
190) $y = \frac{5}{11}x - 9$

$y = \frac{26}{11}x + 12$



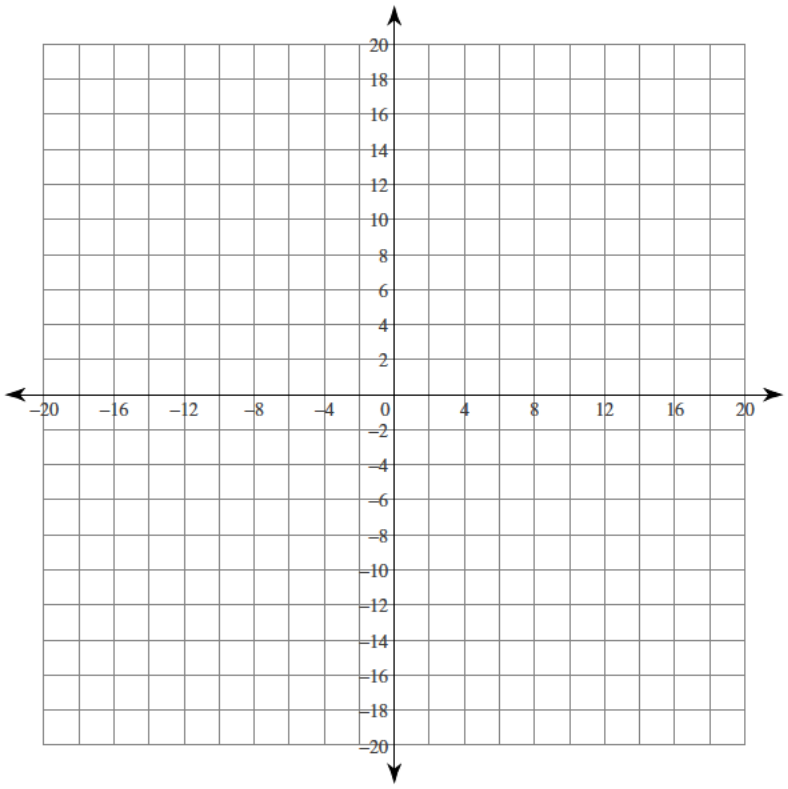
191) $y = -\frac{30}{7}x - 17$

$y = -\frac{3}{7}x + 10$



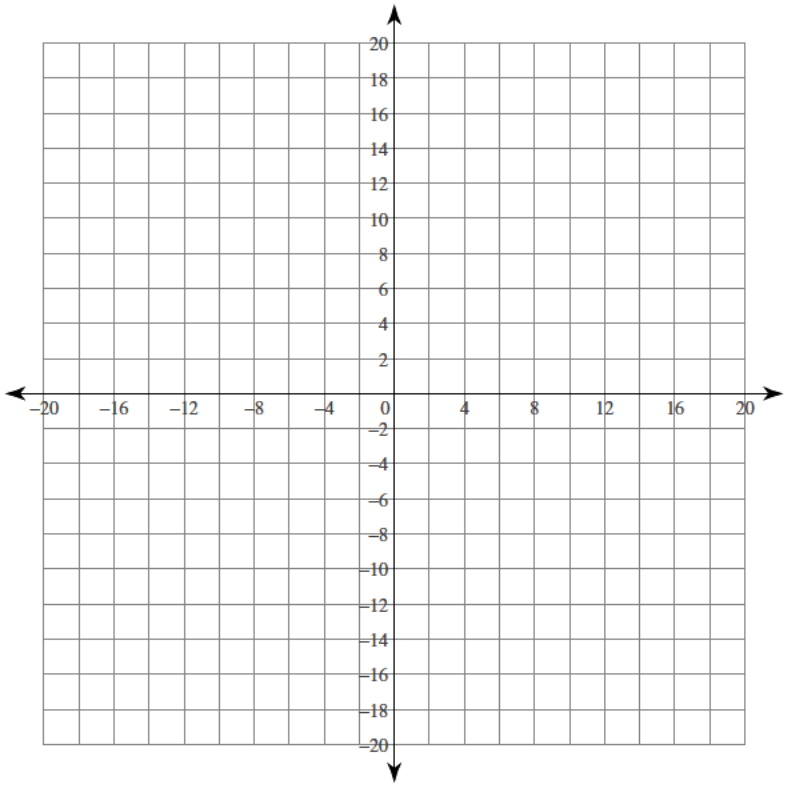
192) $y = \frac{34}{7}x + 15$

$y = \frac{34}{7}x - 4$



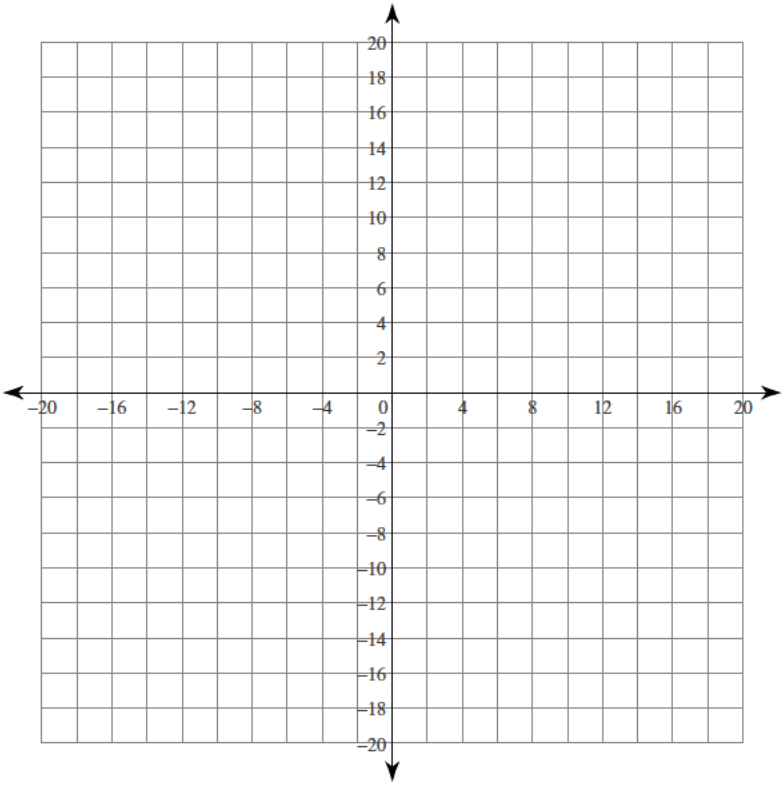
193) $y = 3x - 17$

$y = -\frac{7}{9}x + 17$



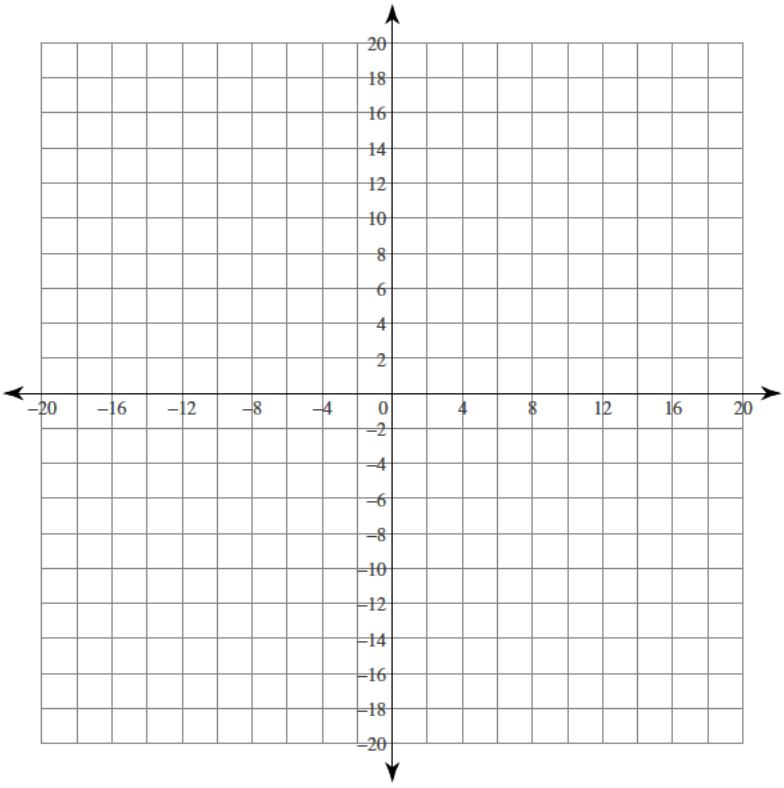
194) $y = -\frac{10}{17}x - 6$

$y = \frac{1}{17}x - 17$



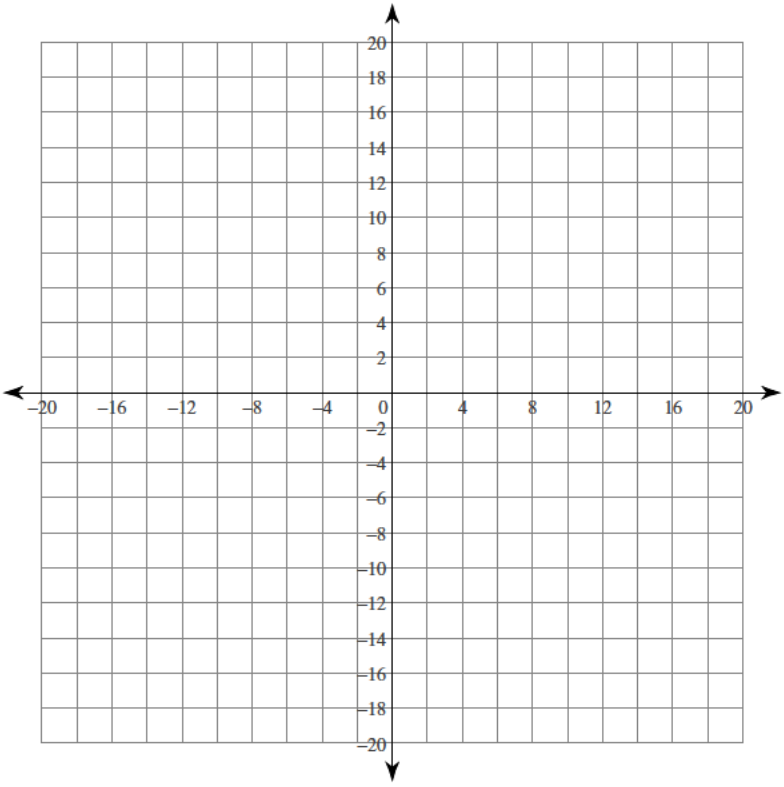
195) $y = \frac{1}{2}x - 18$

$y = -\frac{21}{16}x + 11$



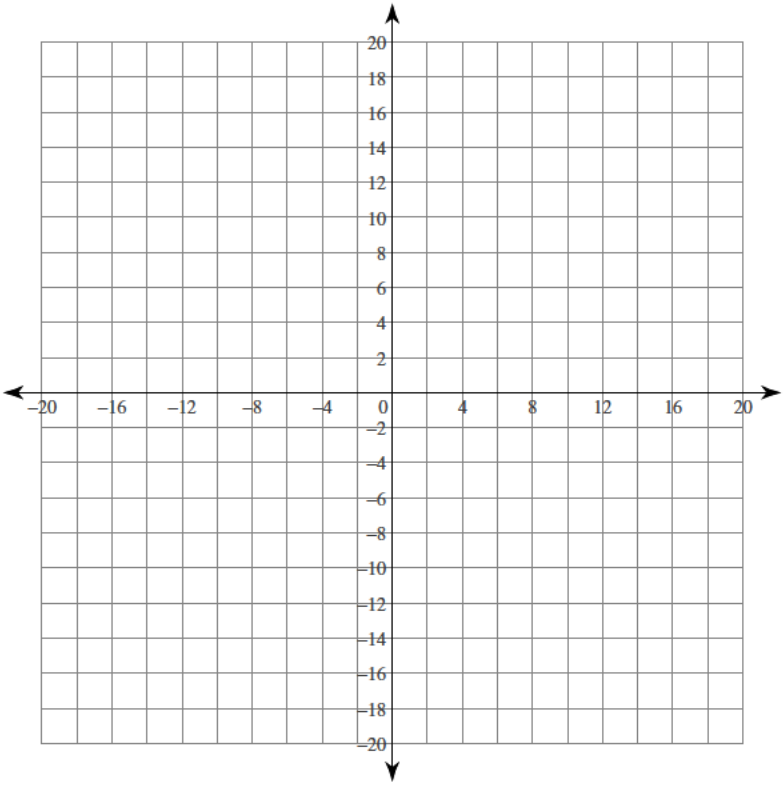
196) $y = \frac{26}{9}x - 10$

$y = \frac{1}{3}x + 13$



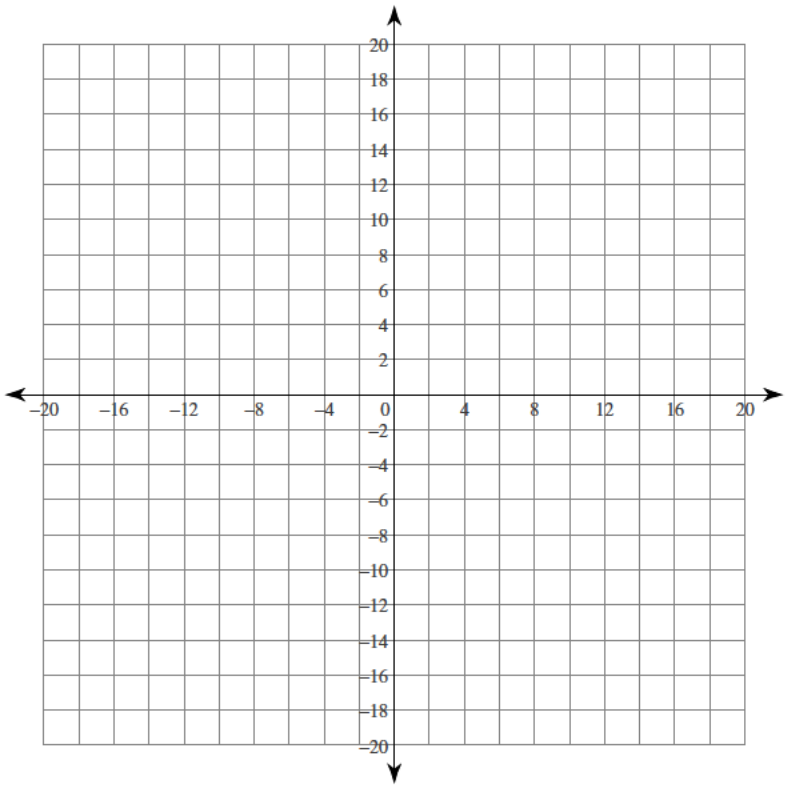
197) $y = \frac{24}{7}x + 11$

$y = -13$



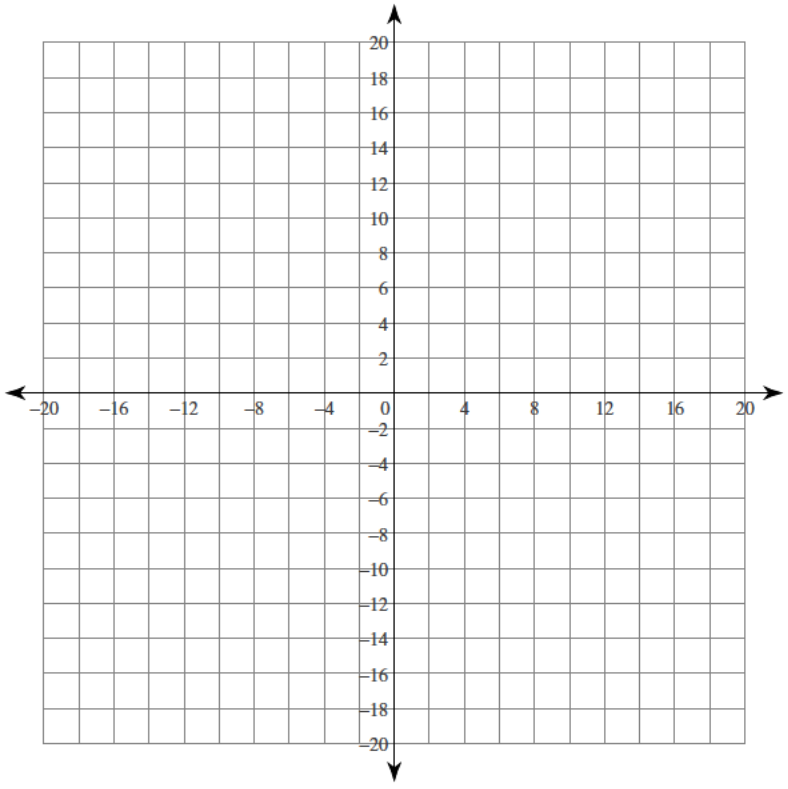
198) $y = \frac{7}{8}x - 17$

$y = -\frac{15}{16}x + 12$



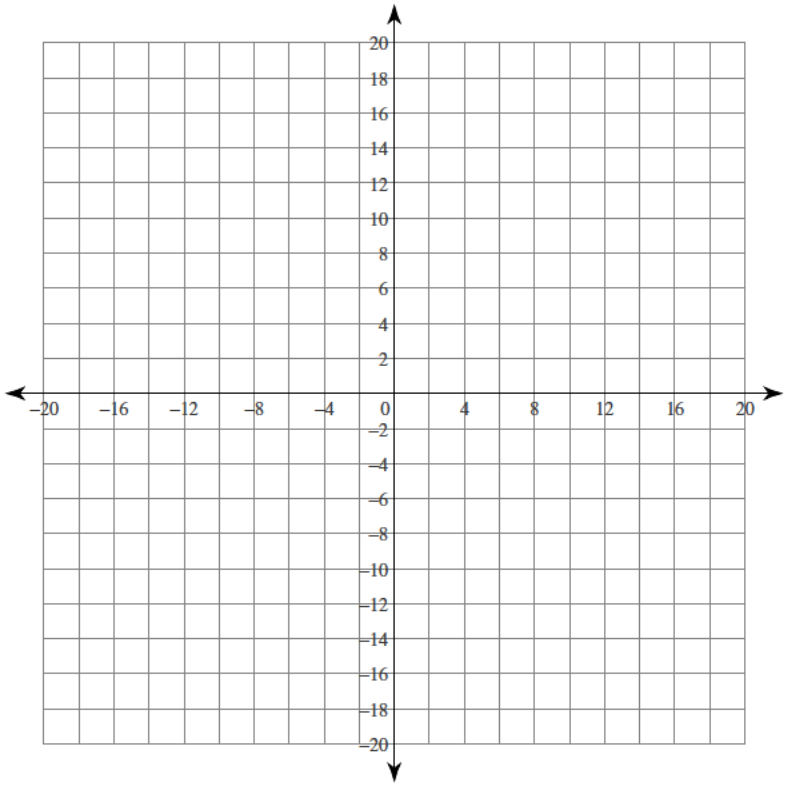
199) $y = -5x - 9$

$y = 2x + 5$



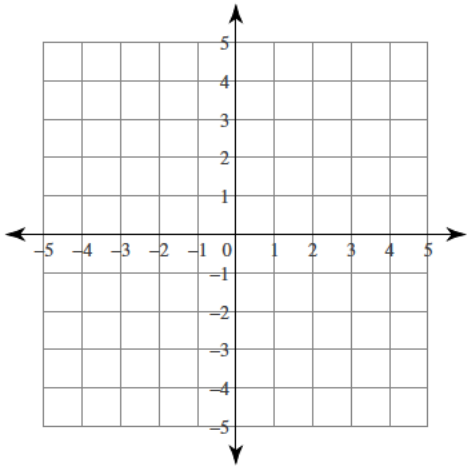
200) $y = -6$

$y = -15x + 9$



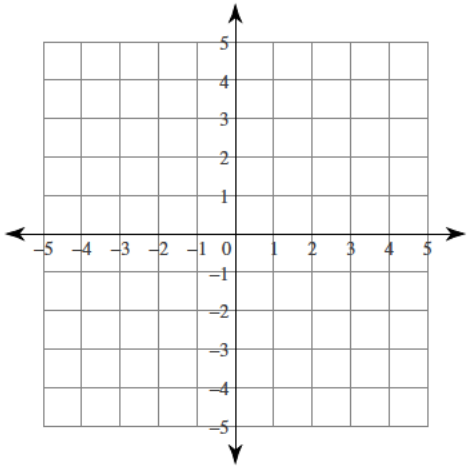
201) $9 = -3y - x$

$1 + x = y$



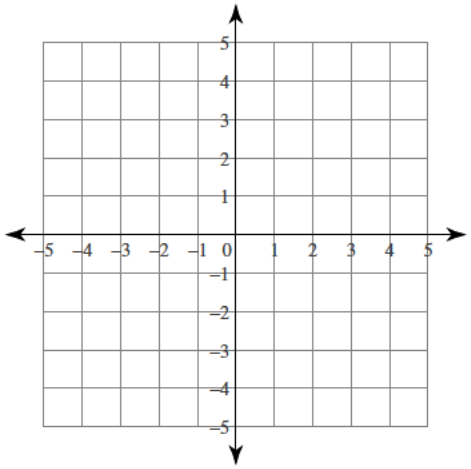
202) $\frac{1}{4}y = 1 - \frac{1}{12}x$

$0 = -6 - x + 3y$



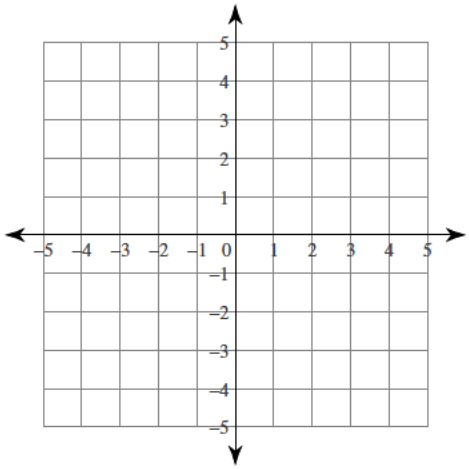
203) $-2 = -y + \frac{1}{3}x$

$18 + 6y = -8x$



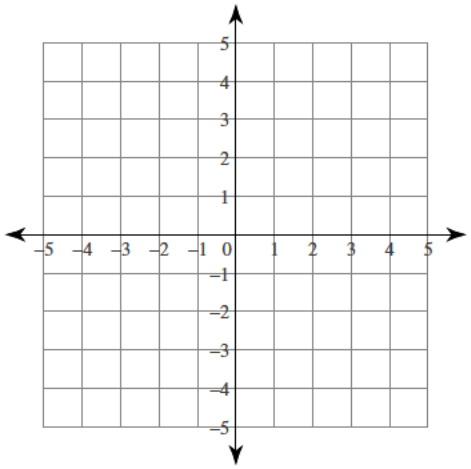
204) $4 = 4x - y$

$6 = -x + 2y$



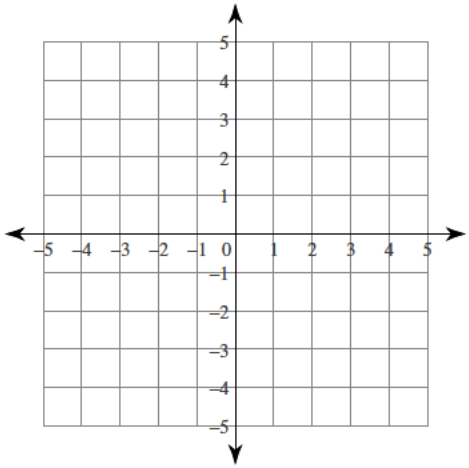
205) $-9 = -3y + 5x$

$0 = 1 - \frac{1}{3}y + \frac{5}{9}x$



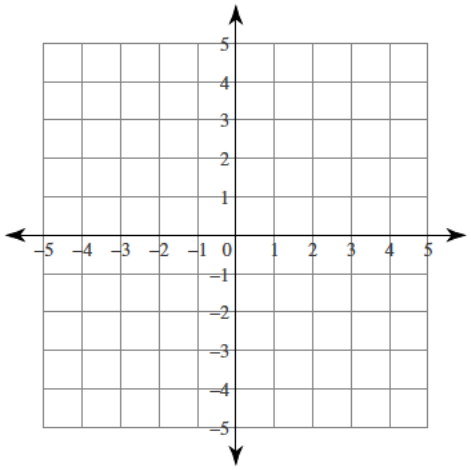
206) $y + 6x = -4$

$-y - 6x - 4 = 0$



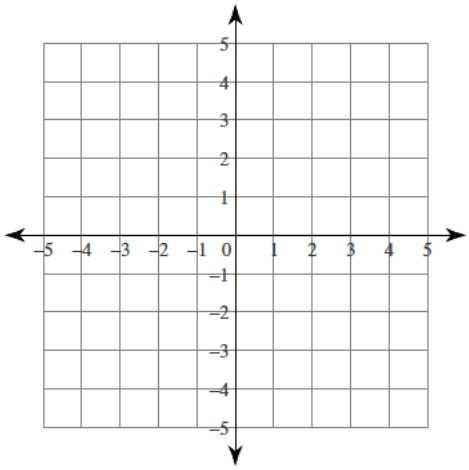
207) $-x - 8 = 4y$

$-8y = -32 - 10x$

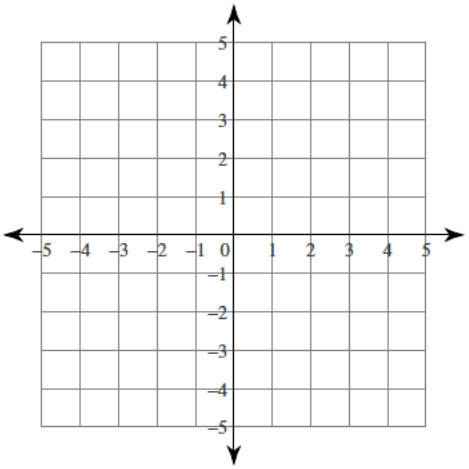


208) $2y = x + 8$

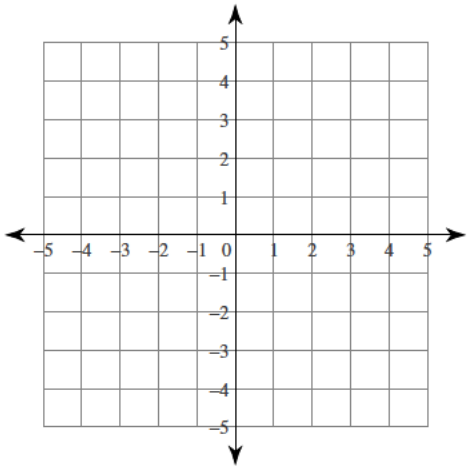
$3 + y + 3x = 0$



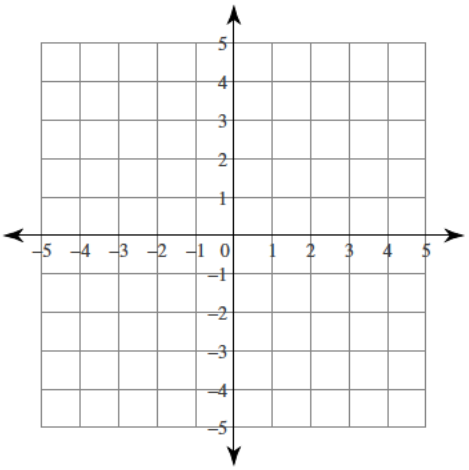
209) $0 = -y - 4 + x$
$6x + y = 3$



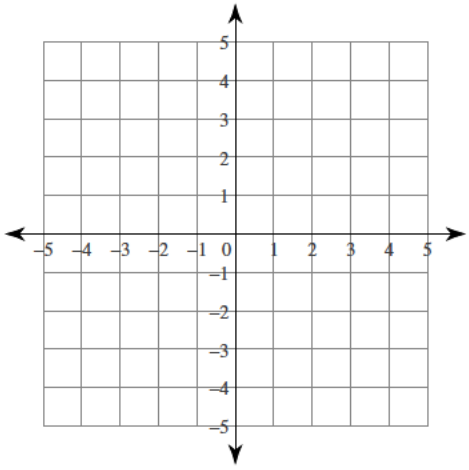
210) $-9 + 21x + 3y = 0$
$3 + x = -y$



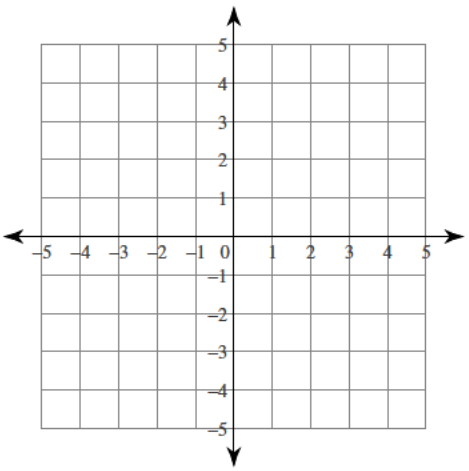
211) $0 = 4x + 3y - 6$
$4x + 3y = 3$



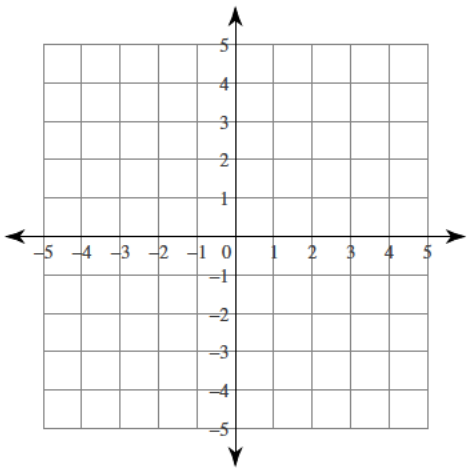
212) $-1 = -\frac{1}{4}x - \frac{1}{2}y$
$0 = 4 + 5x + 2y$



213) $0 = -y + 2x - 4$
$0 = 12 - 6y + 3x$

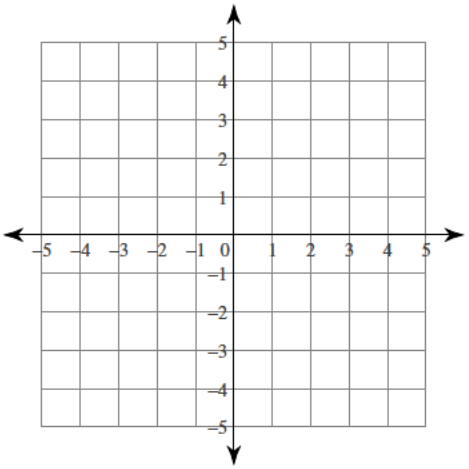


214) $6 - x - 3y = 0$
$3 = 2x - 3y$



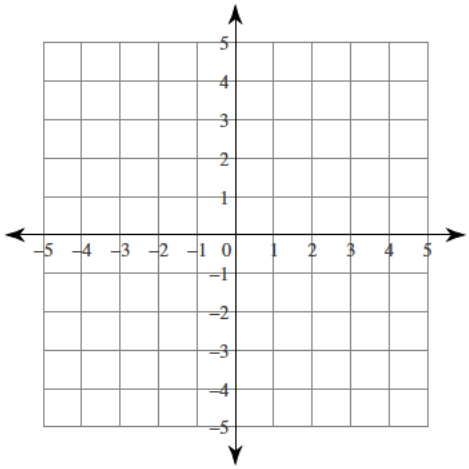
215) $0 = -8 + 2y - 12x$

$-y - 2 = 0$



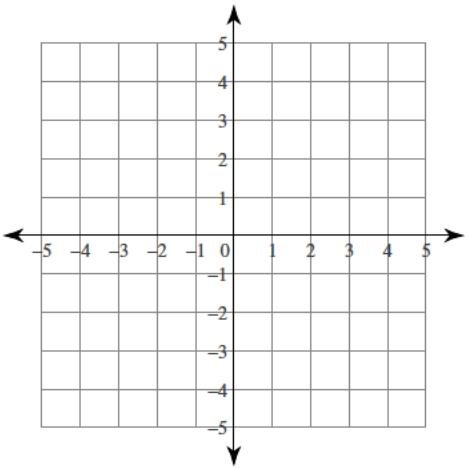
216) $6 + 6x = -3y$

$-2x = -6 + 3y$



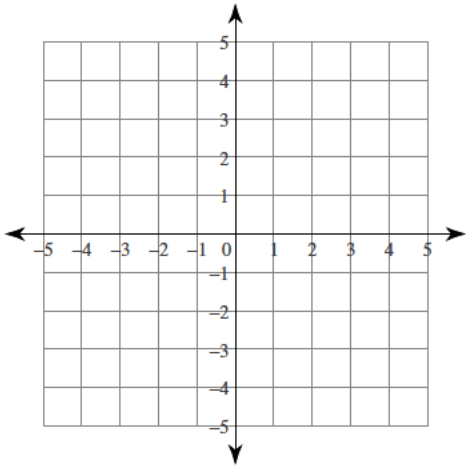
217) $x + 3y - 9 = 0$

$-x + 3y - 3 = 0$



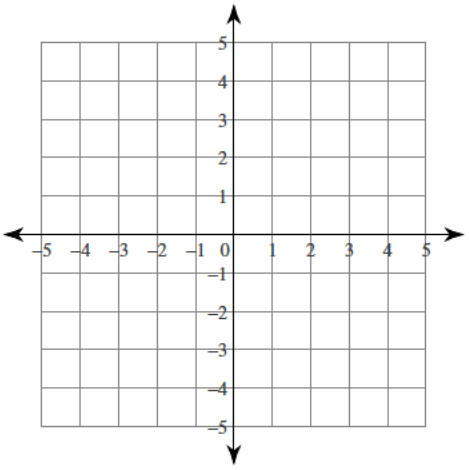
218) $-2 - y = \frac{1}{2}x$

$-y = -x - 1$



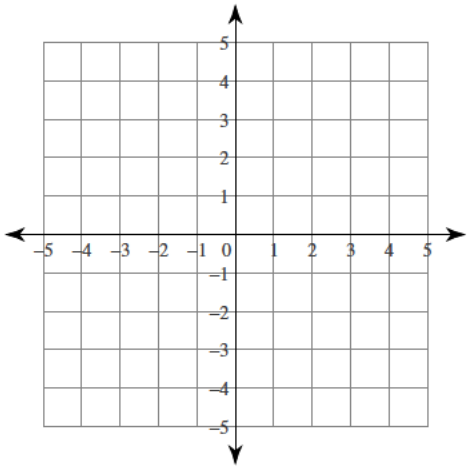
219) $0 = -3x + 2 + 2y$

$2 + 2y = 3x$

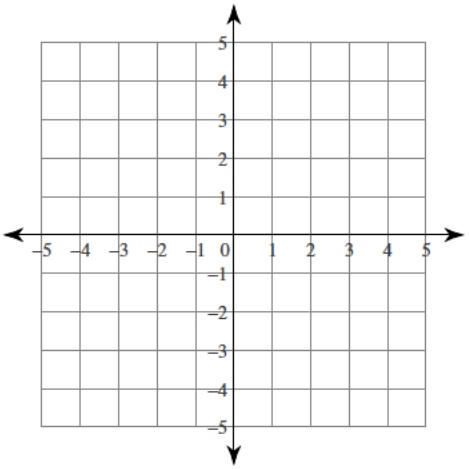


220) $x + 4y + 8 = 0$

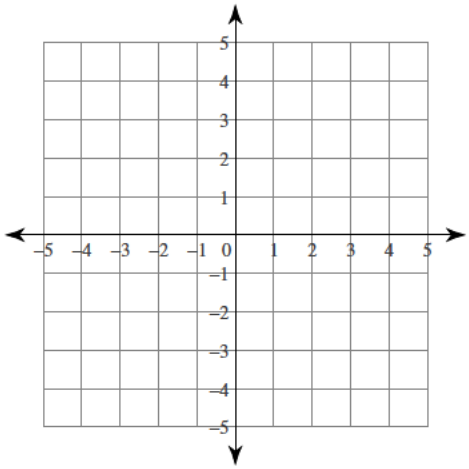
$4y + 8 + x = 0$



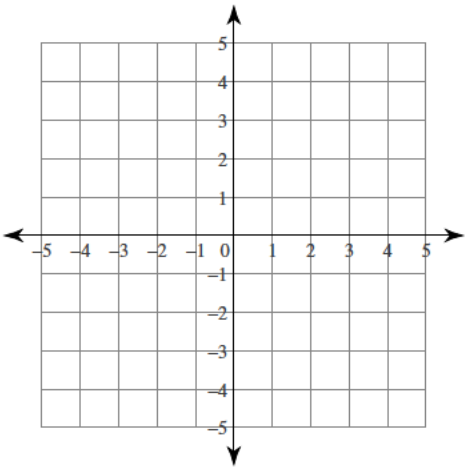
221) $-8y + 10x = -8$
$0 = 12 - x + 4y$



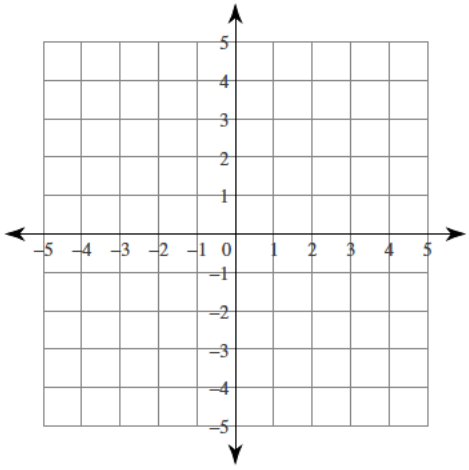
222) $3y = 6 - 4x$
$3y - x = -9$



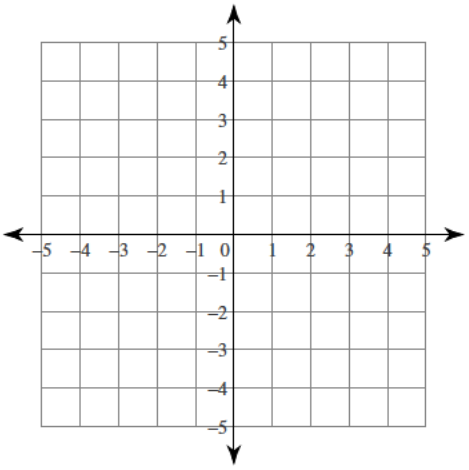
223) $-8 + 4x = 2y$
$2 = -y$



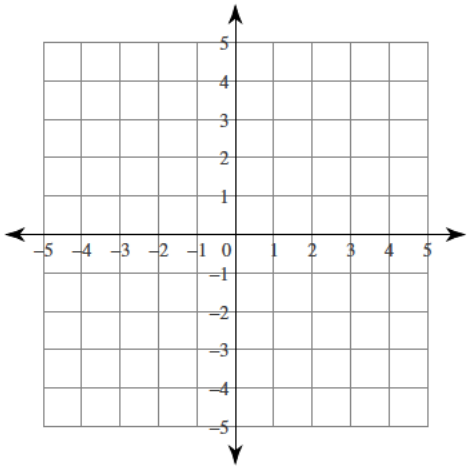
224) $-2x + 12 - 6y = 0$
$-x - \frac{3}{2} = \frac{1}{2}y$



225) $-12 = 5x + 3y$
$12 - 3y = -3x$

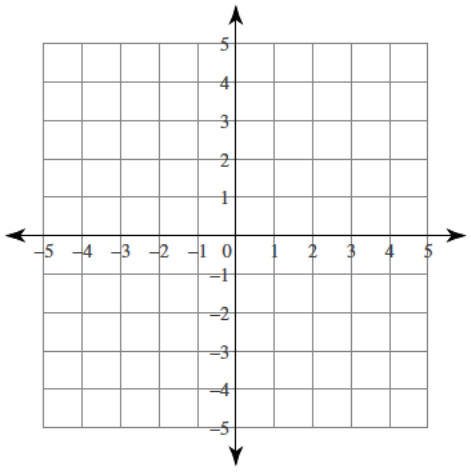


226) $-8x - y = 4$
$-3 = -y - x$



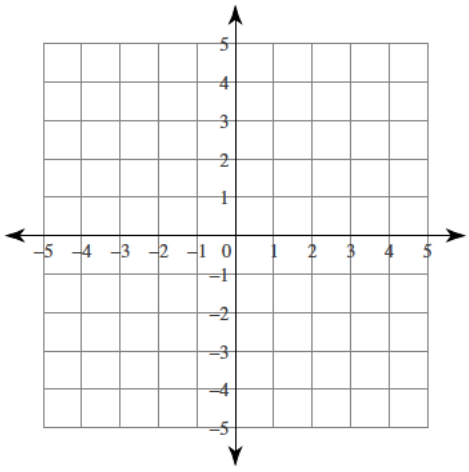
227) $-\frac{24}{5} - \frac{8}{5}y = 2x$

$12 = -4y - 5x$



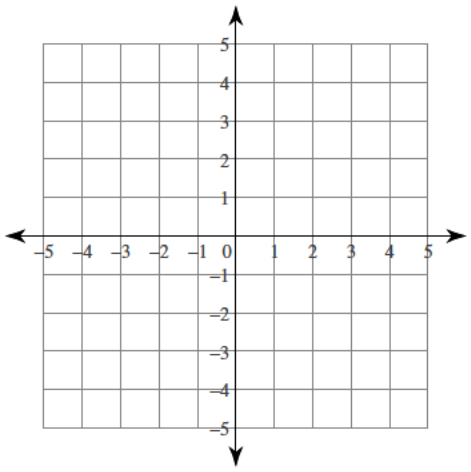
228) $0 = -2x + 12 + 3y$

$-x + \frac{3}{2}y = -\frac{9}{2}$



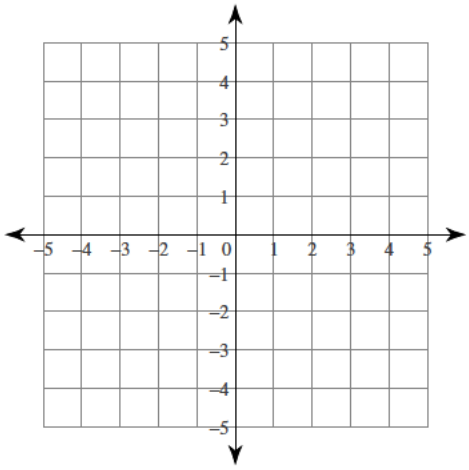
229) $-2 = y - x$

$2 = -y + x$



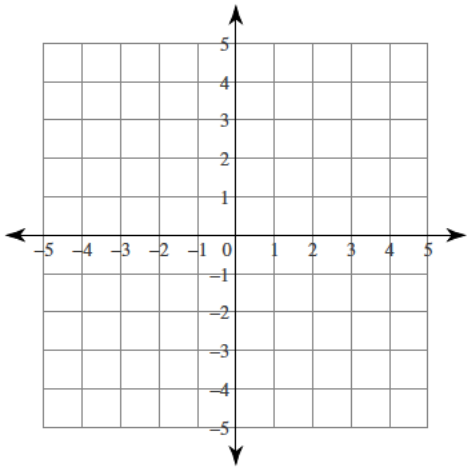
230) $-4 - 2y + x = 0$

$4 - \frac{3}{2}x = -y$



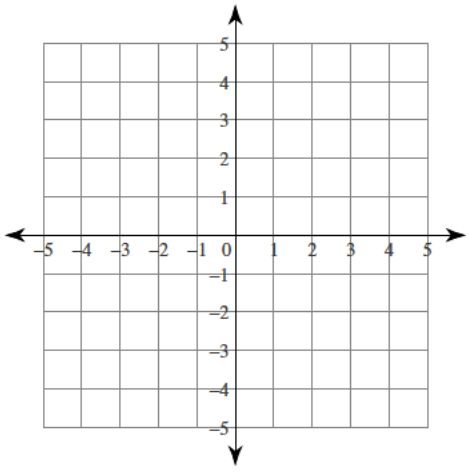
231) $x = 12 - 4y$

$10x - 24 = 8y$

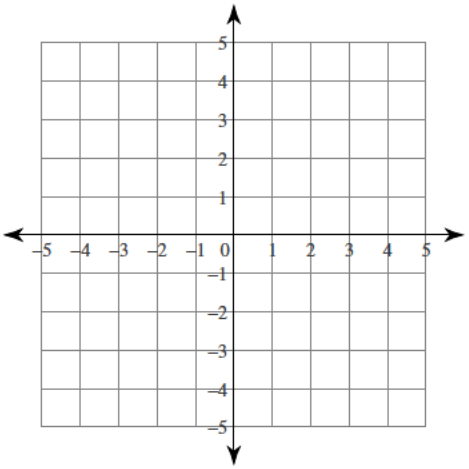


232) $0 = 3x - y + 3$

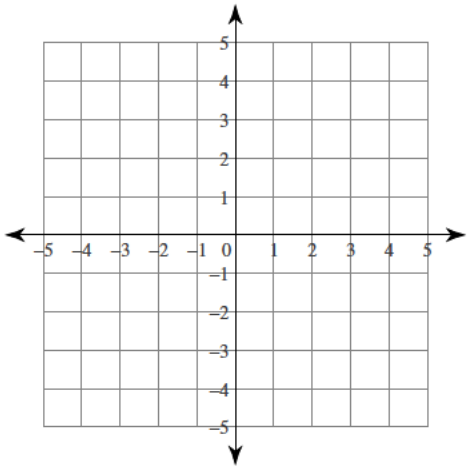
$0 = -3 - y$



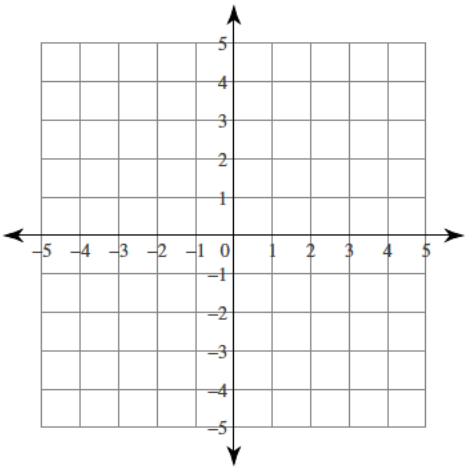
233) $8 - 2y = -3x$
$y + 1 + x = 0$



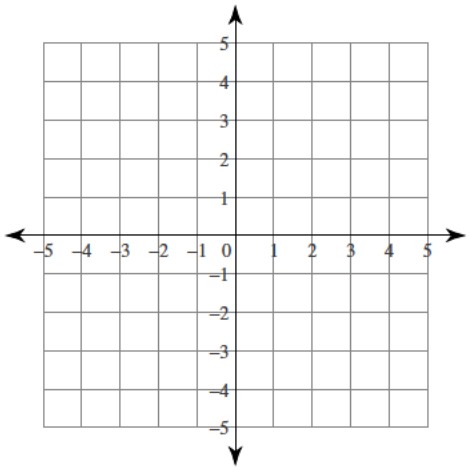
234) $x = 3y - 6$
$-3 + 4x = 3y$



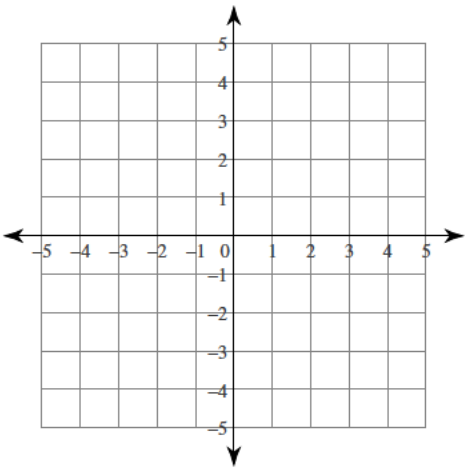
235) $8 + 2x = 2y$
$0 = 3 - y + x$



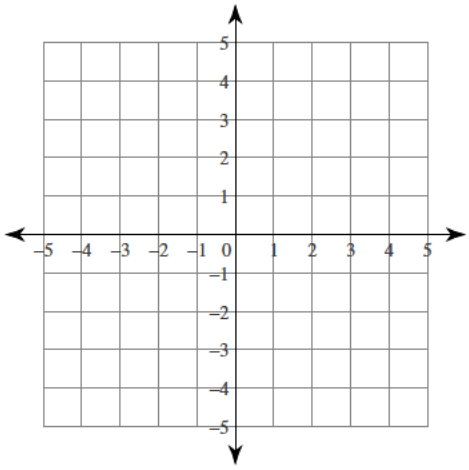
236) $6 = 3y - 2x$
$-6x = -9y - 27$



237) $2y - x = 8$
$x = -2 - y$

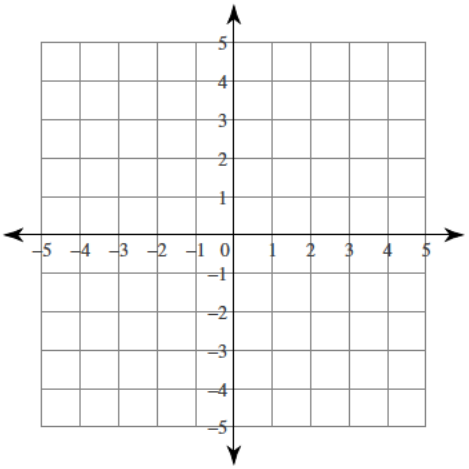


238) $-12 = 4y + x$
$-3y = -3 + \frac{3}{4}x$



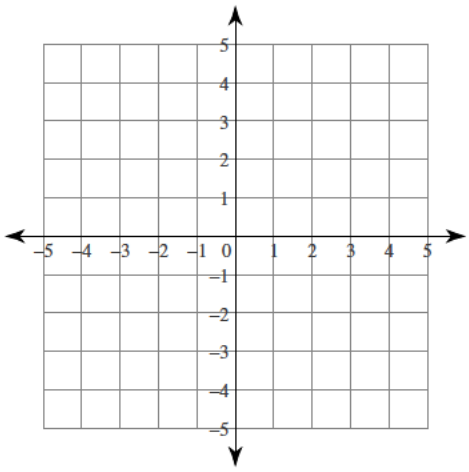
239) $2 = -y - x$

$-4 = y$



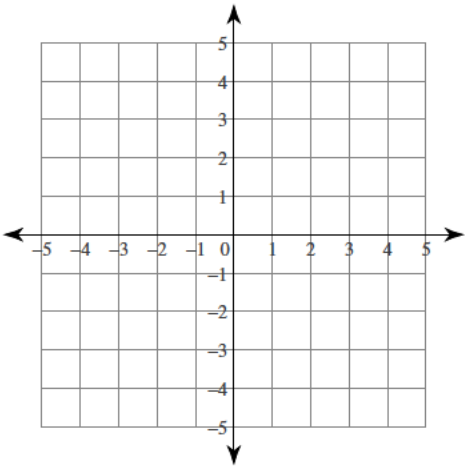
240) $\frac{3}{4} - \frac{3}{4}y = -x$

$0 = y + 2 - \frac{1}{3}x$



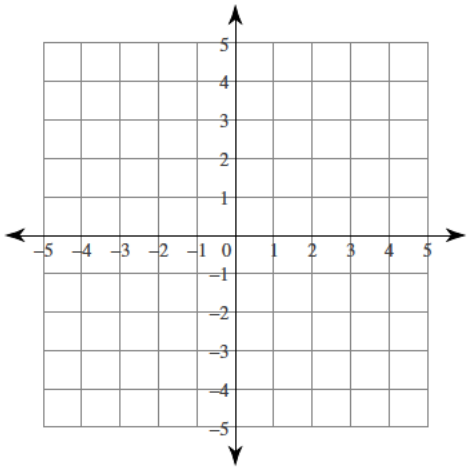
241) $4 + 2x - y = 0$

$2y - 2 = -2x$



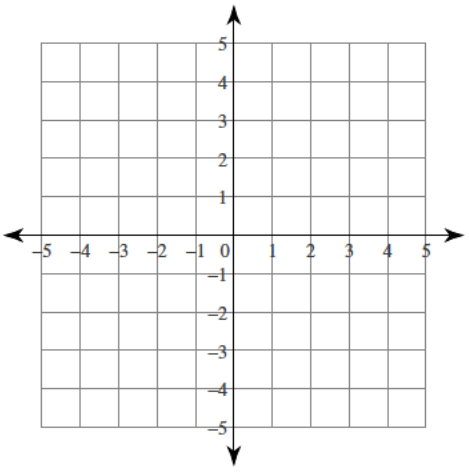
242) $-16 = -5x - 4y$

$x - \frac{4}{3}y = \frac{16}{3}$



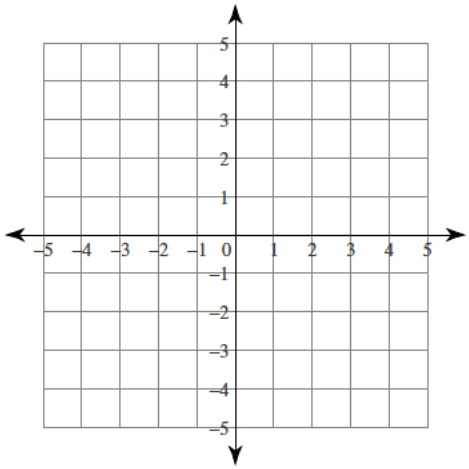
243) $0 = x + 2 + y$

$\frac{6}{5} = 3x + \frac{3}{5}y$

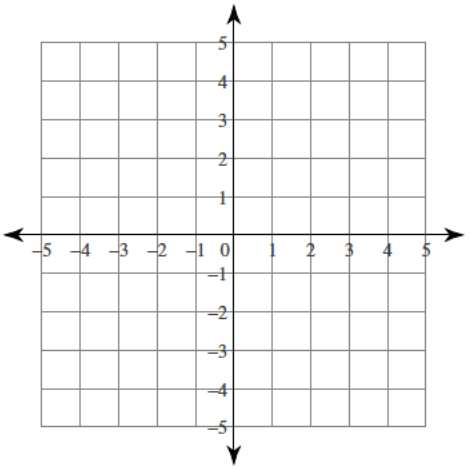


244) $-1 - x + y = 0$

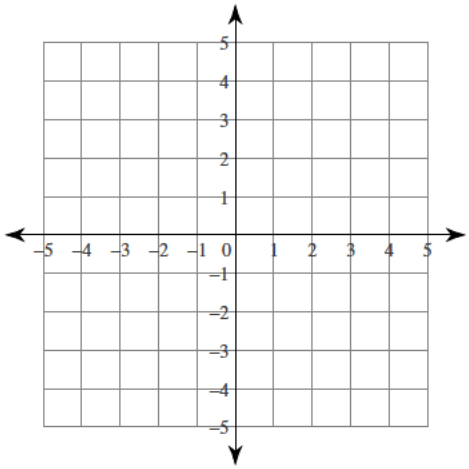
$-y + x = 1$



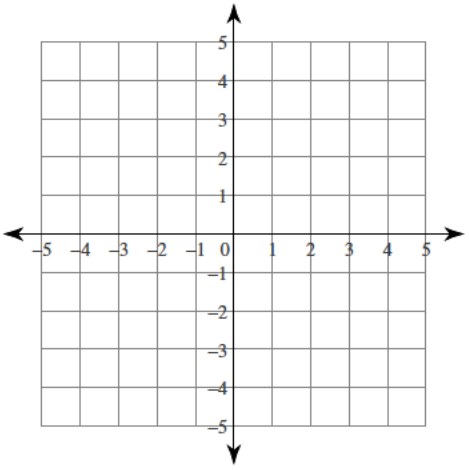
245) $21x - 36 = -9y$
$3 + 3y = -2x$



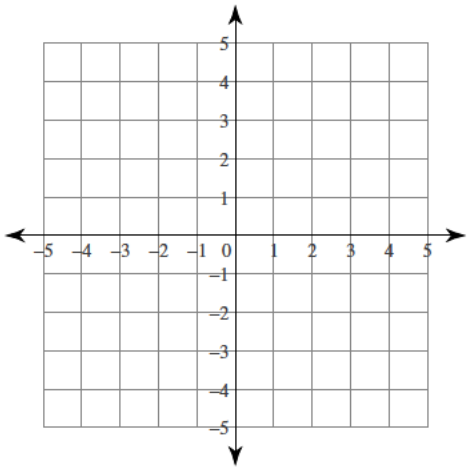
246) $3x = 12 - 3y$
$-12 - 3y = -5x$



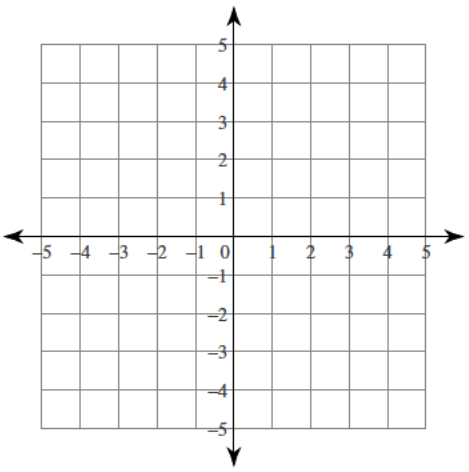
247) $-x - \frac{1}{3}y = 1$
$-4y + 2x + 16 = 0$



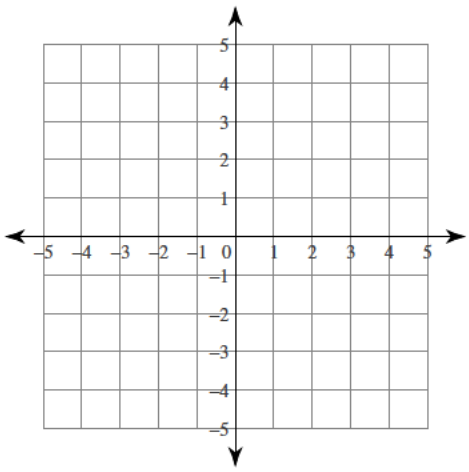
248) $-27 - 21x = 9y$
$0 = 6 - 3y - 7x$



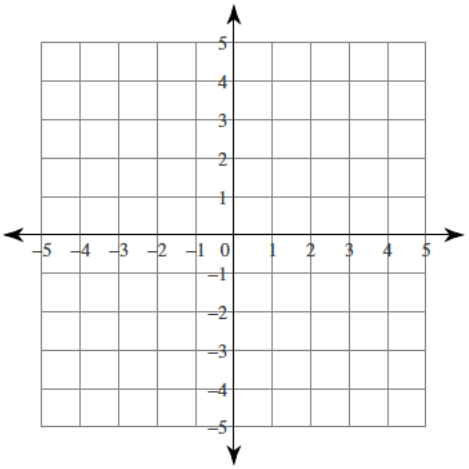
249) $-3 + y = -x$
$15x = 24 + 6y$



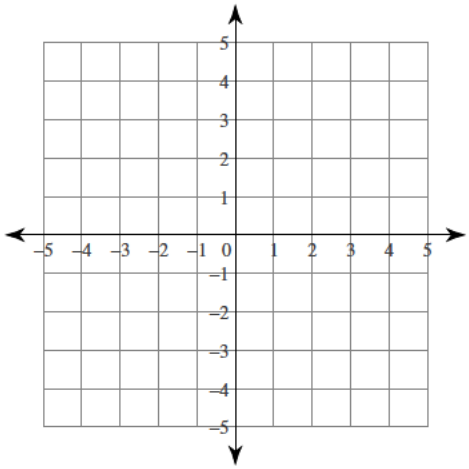
250) $-4 = y - x$
$4 = 2y + 4x$



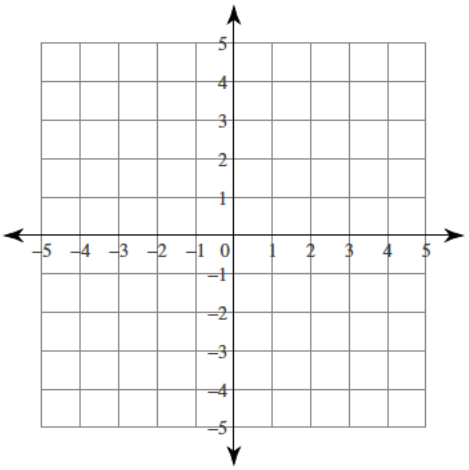
251) $4y = -4 + 3x$
$3x - 4y = 4$



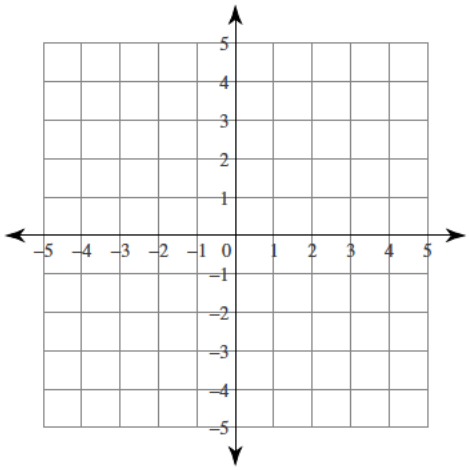
252) $3x + y = -4$
$-4 - 3x = y$



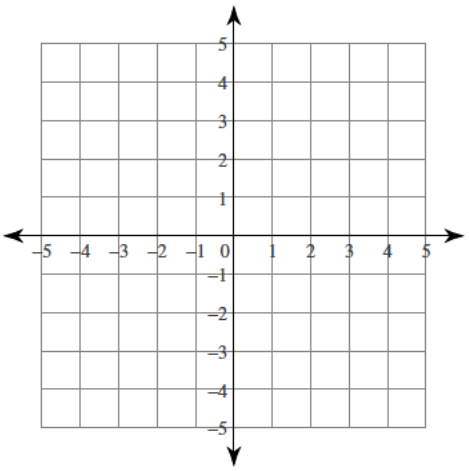
253) $-y - x = -3$
$x = -1 + y$



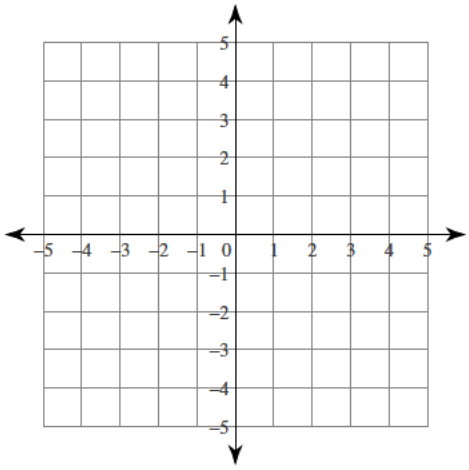
254) $-6 - 5x = -2y$
$2y + 2 - x = 0$



255) $0 = 4 + x - y$
$-y - x + 2 = 0$

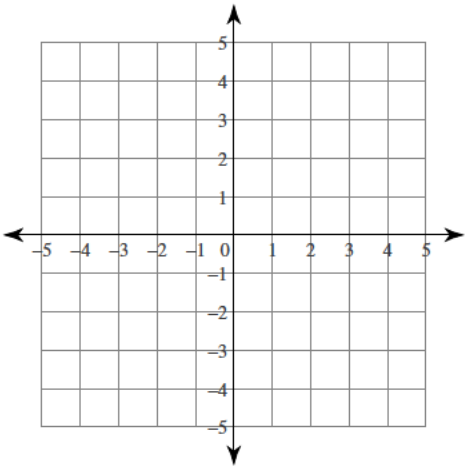


256) $-\frac{1}{2}x + \frac{1}{3}y = 1$
$x + 16 = -4y$



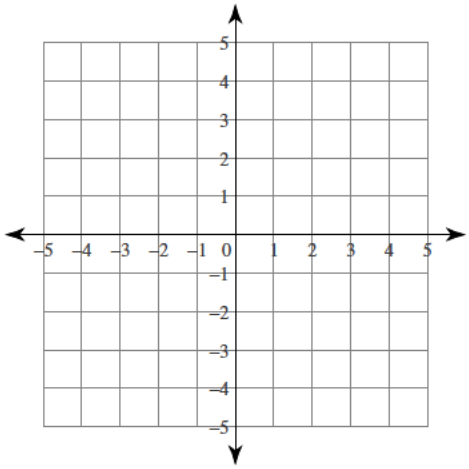
257) $-12y - 48 = -3x$

$y = -x + 1$



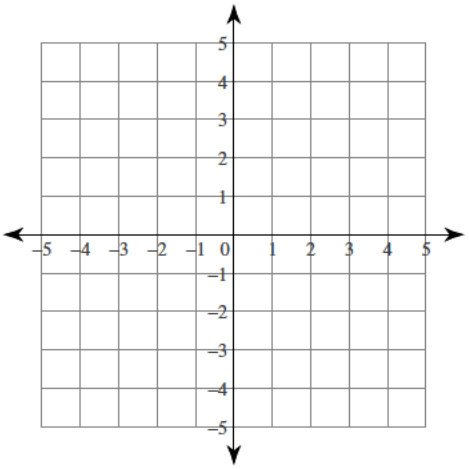
258) $3 = -y - \frac{4}{3}x$

$-9 - 2x = -3y$



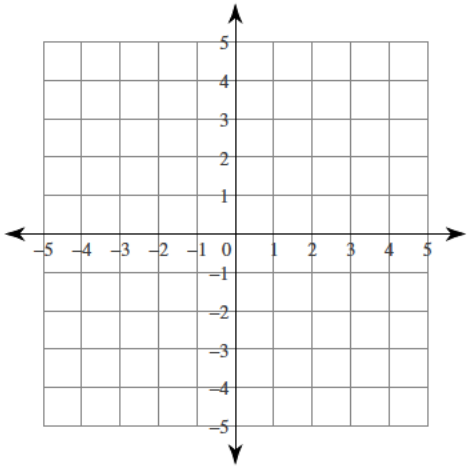
259) $-3 = 9x + \frac{3}{2}y$

$4 = -y - 6x$



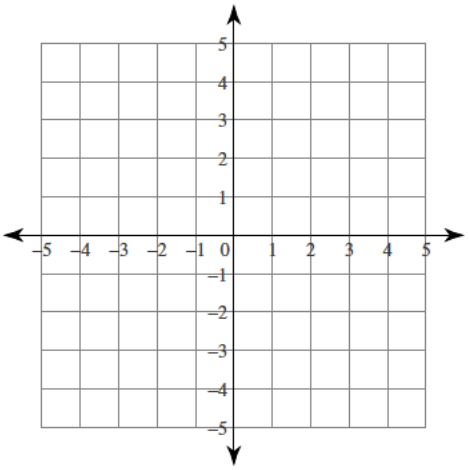
260) $-9 = 3y - x$

$15x - 27 = -9y$



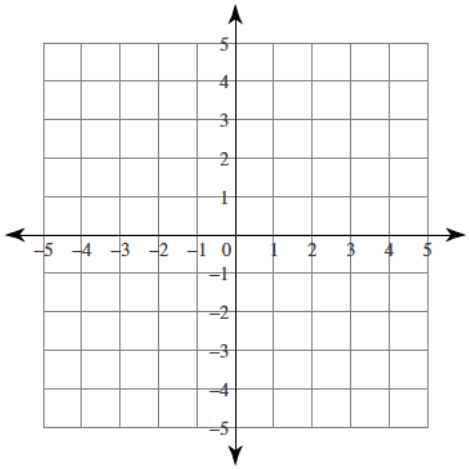
261) $0 = -3x + 3y + 9$

$-y = 4$



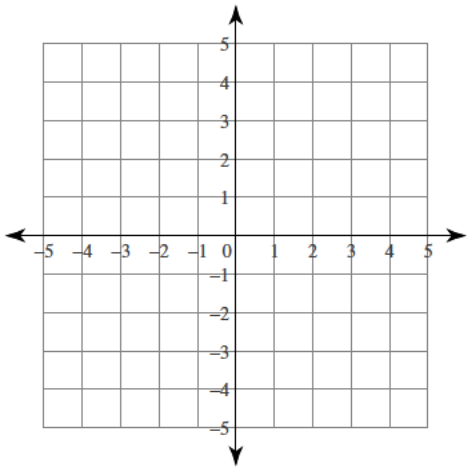
262) $0 = x + 2y + 2$

$-2y = -8 - \frac{3}{2}x$



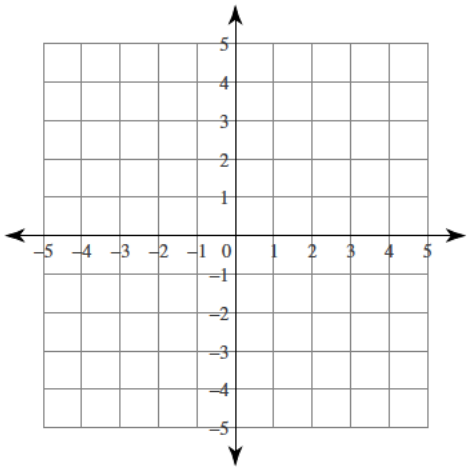
263) $-16 = -6x + 4y$

$y + \frac{3}{2}x = 2$



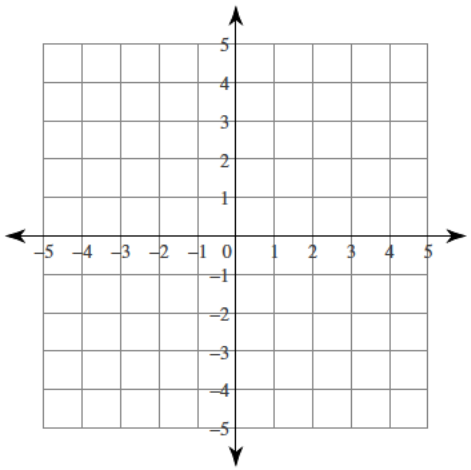
264) $\frac{7}{2}x = y - 3$

$2x = 4y + 12$



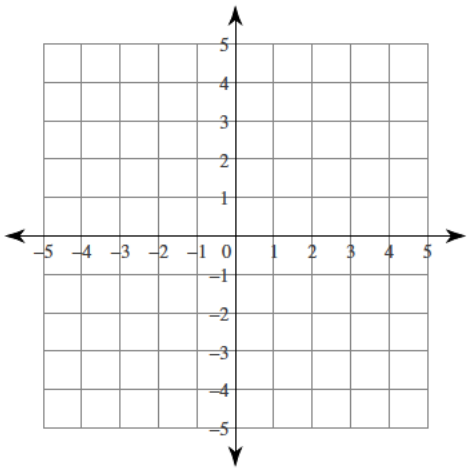
265) $3y = 9 + 2x$

$-y = 2 + x$



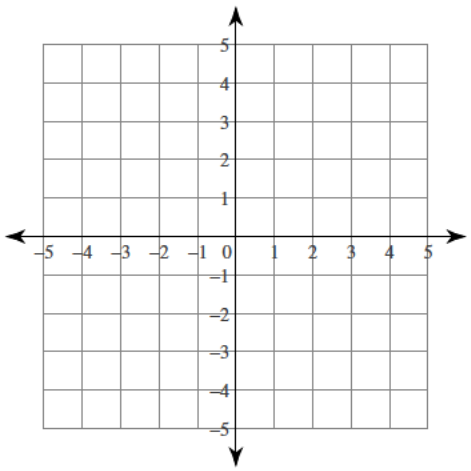
266) $0 = -3x - 4 - 4y$

$-12 = x - 4y$



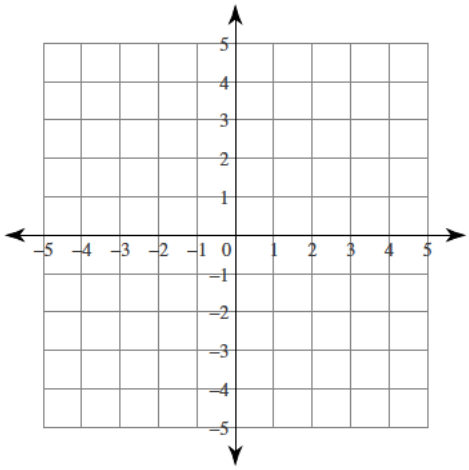
267) $14x - 8y = 32$

$-16 = -7x + 4y$

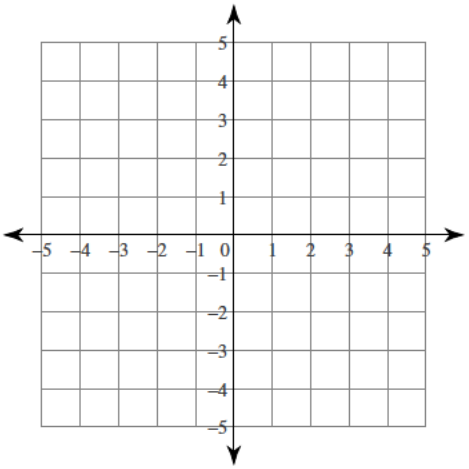


268) $x - \frac{1}{2}y = 1$

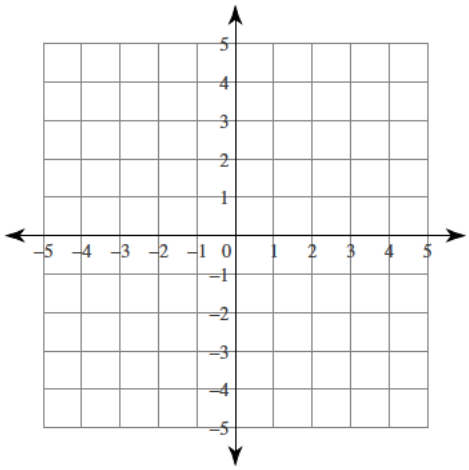
$-3y + 6x = -6$



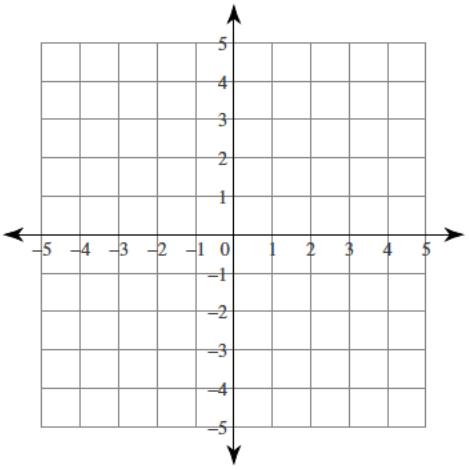
269) $-x = -3 - 3y$
$12 + 2x = -3y$



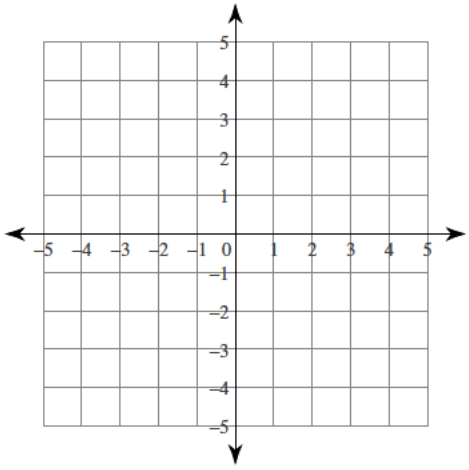
270) $-3y = 2x + 3$
$x - \frac{3}{2}y = -\frac{9}{2}$



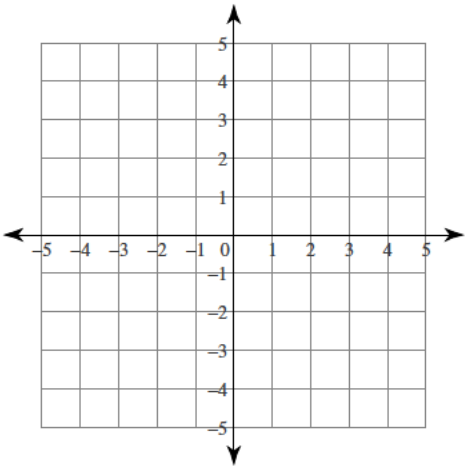
271) $\frac{4}{3}y = -x + \frac{16}{3}$
$2 = -2y + x$



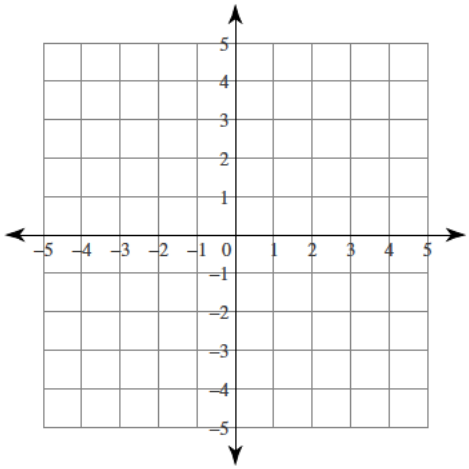
272) $0 = 7x - 6 + 2y$
$4 = -y$



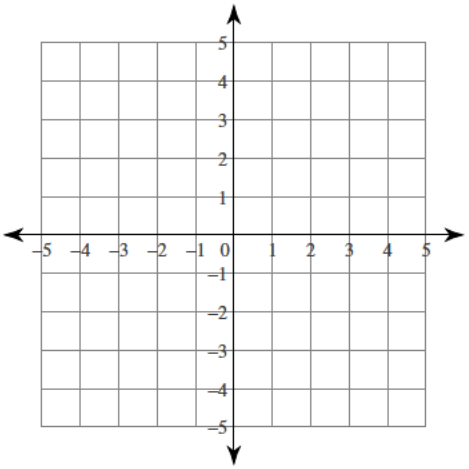
273) $-x - 12 = 3y$
$-\frac{36}{7} + \frac{9}{7}y = 3x$



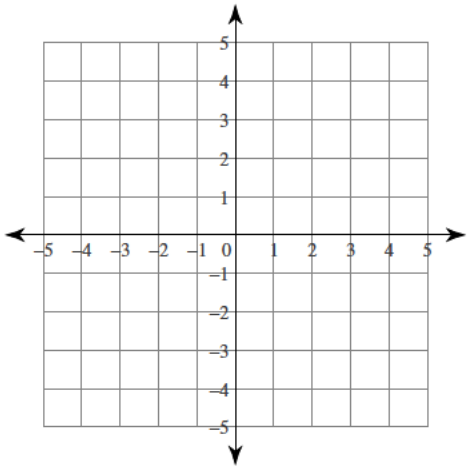
274) $0 = -x + \frac{4}{3}y - \frac{8}{3}$
$-6x = 16 - 8y$



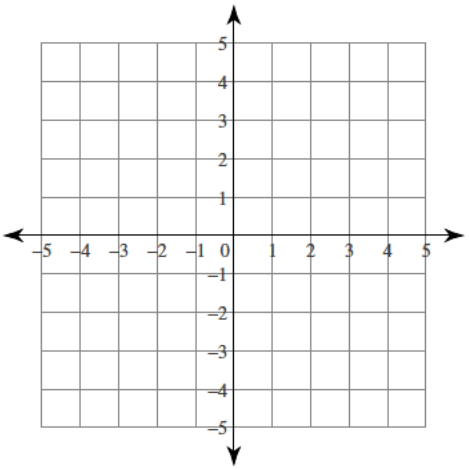
275) $y + x = 1$
$2 + y = -4x$



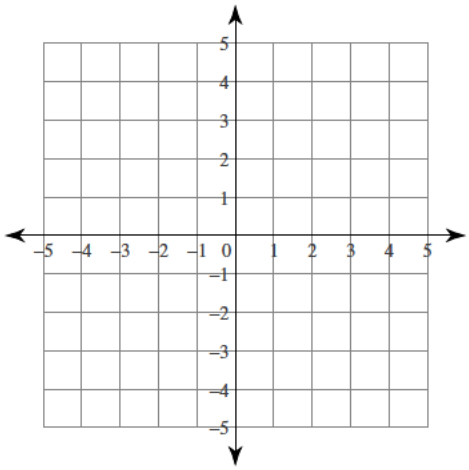
276) $3y = 6 + 2x$
$2y + 4 = 4x$



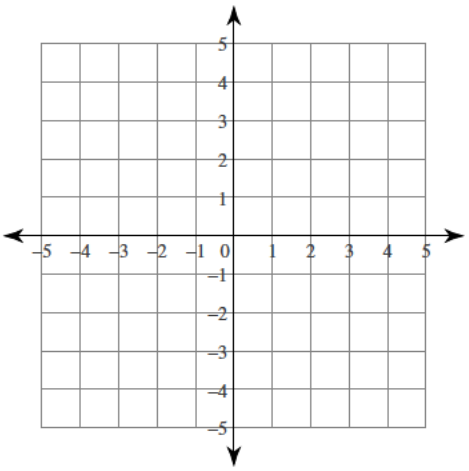
277) $-4 - 2x = 2y$
$-1 + 4x = -y$



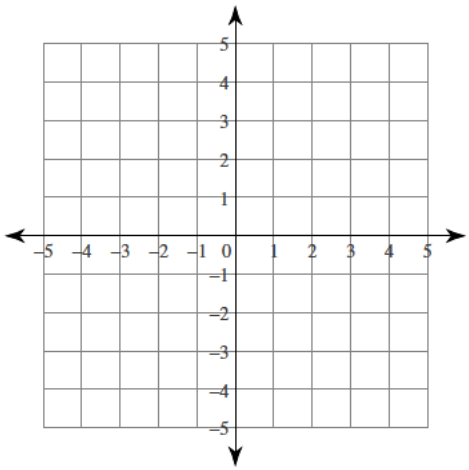
278) $-8 = -2y + x$
$-1 + x = -y$



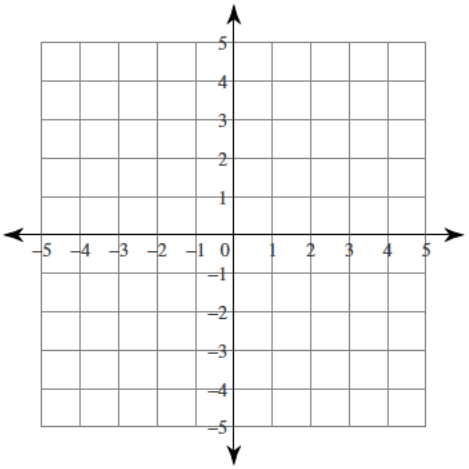
279) $3y = -x + 12$
$3y - 4x = -3$



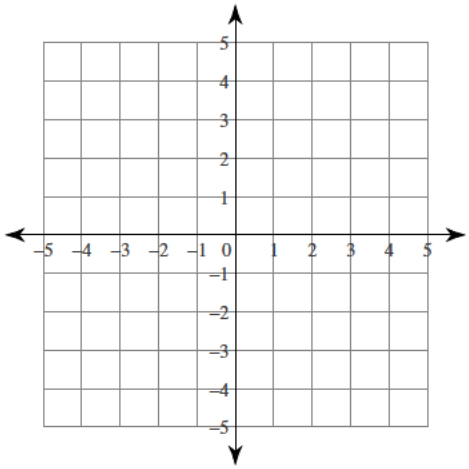
280) $2y + 2 = -x$
$2y - 4 = -x$



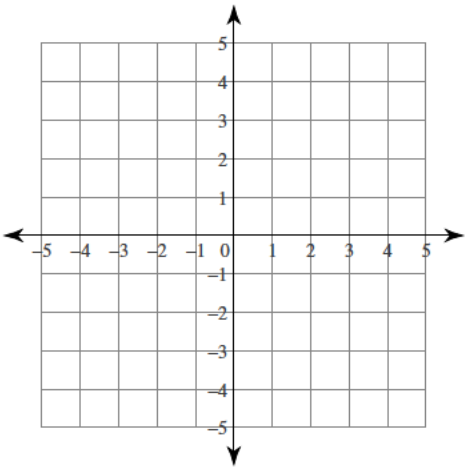
281) $2x = -2y + 6$
$-4 = -3x + 2y$



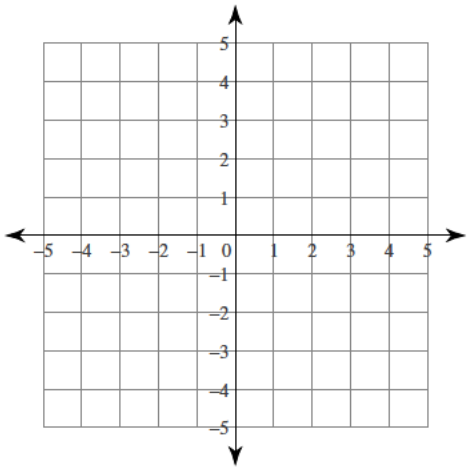
282) $36 = 12y + 3x$
$-3y - 12 - 6x = 0$



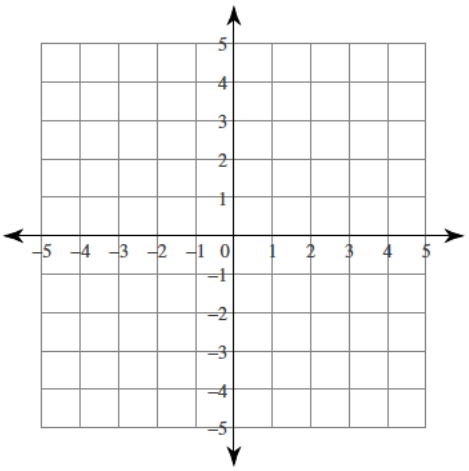
283) $2 + 3x = -y$
$-12 + 4y + 2x = 0$



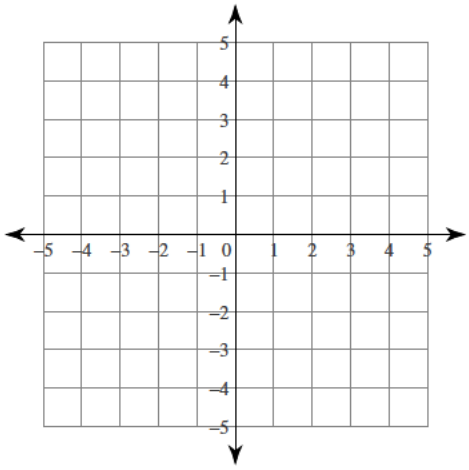
284) $y + x - 4 = 0$
$x - 2 = 0$



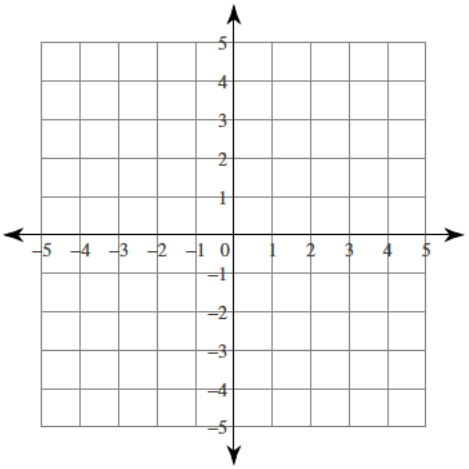
285) $5x = y - 4$
$y = -x - 2$



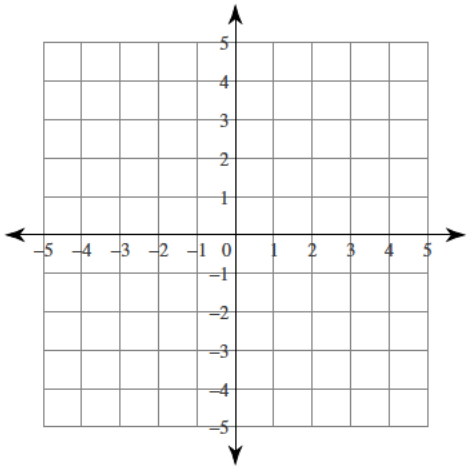
286) $y = -2x + 4$
$\frac{1}{12}x = -1 - \frac{1}{3}y$



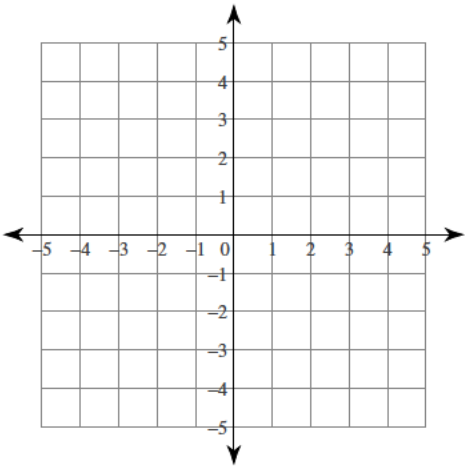
287) $9 = -3y - x$
$-9y + 12x = -18$



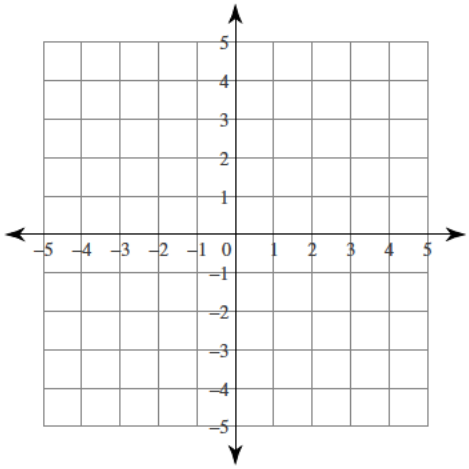
288) $6 + x = -3y$
$0 = -2x + 24 + 6y$



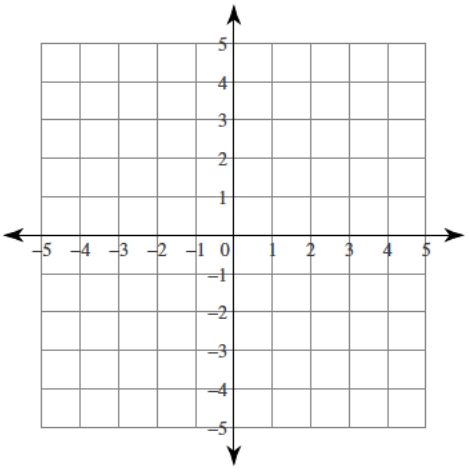
289) $\frac{1}{2} = x - \frac{1}{6}y$
$-\frac{1}{2}y = -1 - \frac{1}{2}x$



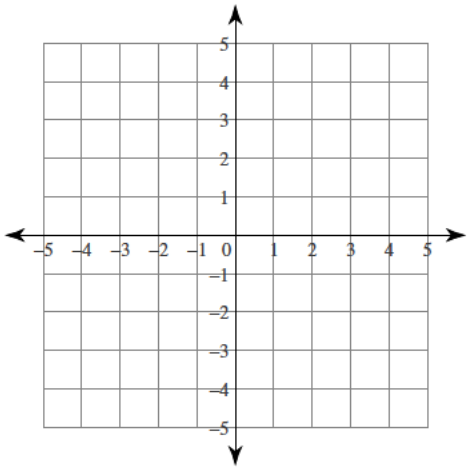
290) $-2y = -x + 2$
$4 = -3x + y$



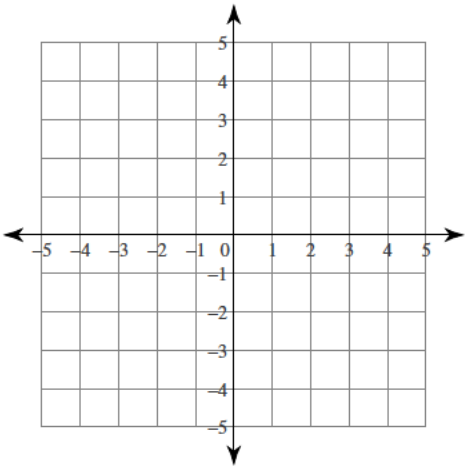
291) $3x = -2y + 2$
$-4 = y - x$



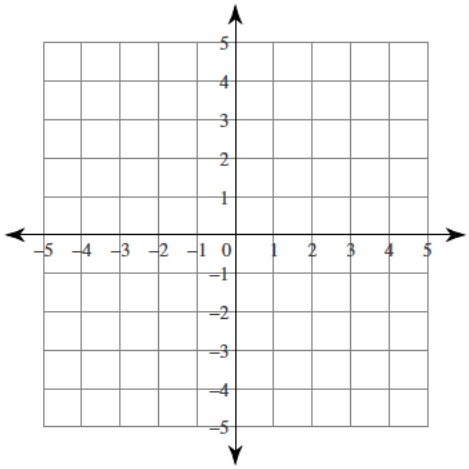
292) $-y - 2 = x$
$2x - 3y = -9$



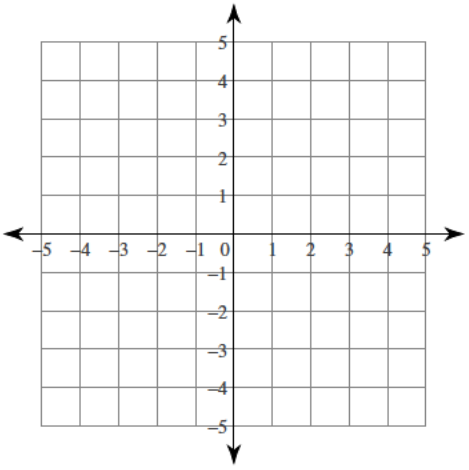
293) $16 - 4y = -2x$
$24 = -3x + 6y$



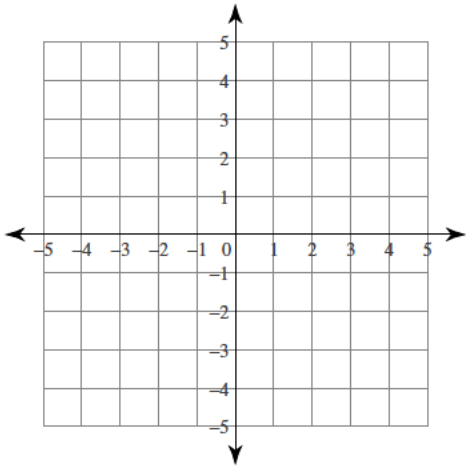
294) $4 - 3x - 2y = 0$
$3 - x = -y$



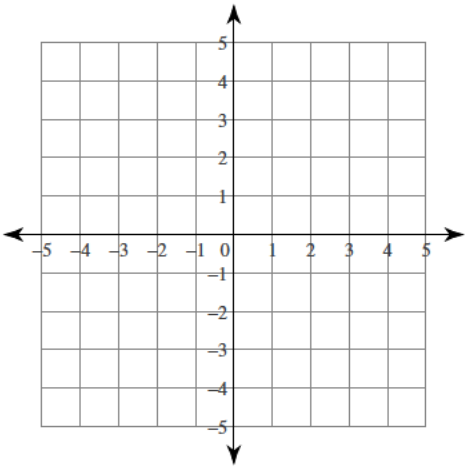
295) $x = -y + 3$
$-\frac{3}{2} - \frac{3}{8}y = 3x$



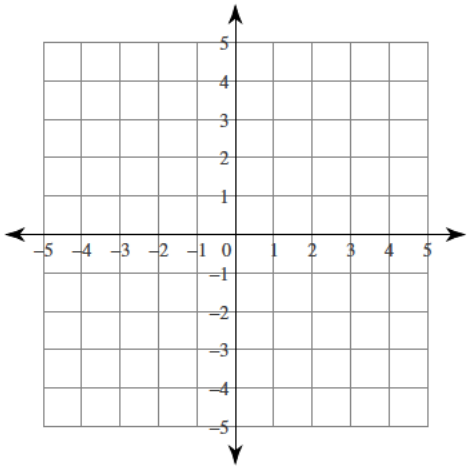
296) $2x = y + 3$
$-2y - 8x + 6 = 0$



297) $-x + 16 = 4y$
$-1 - y + x = 0$

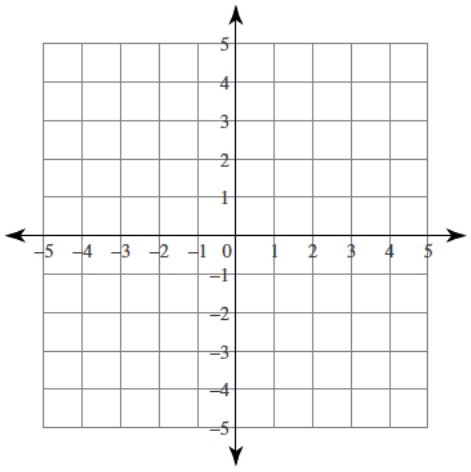


298) $-12y + 3x = -36$
$y + 4 - 2x = 0$



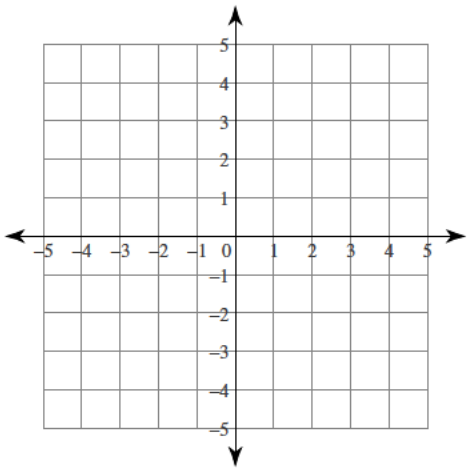
299) $-y-2+\frac{1}{2}x=0$

$2=-x$



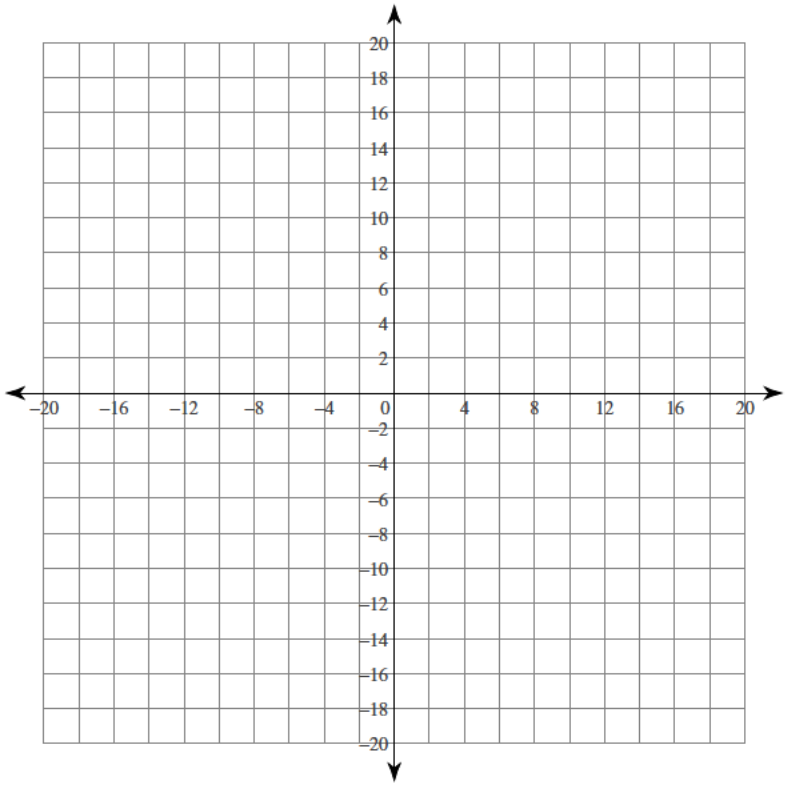
300) $y+\frac{5}{4}x=-1$

$0=1-\frac{1}{3}y-\frac{1}{12}x$



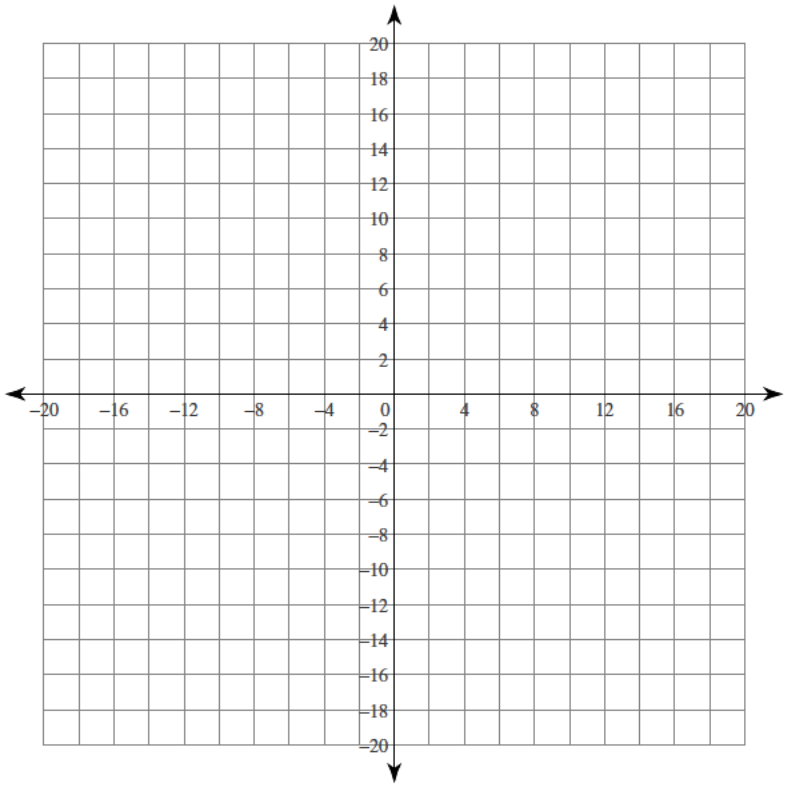
301) $18-x=0$

$60-6y=7x$



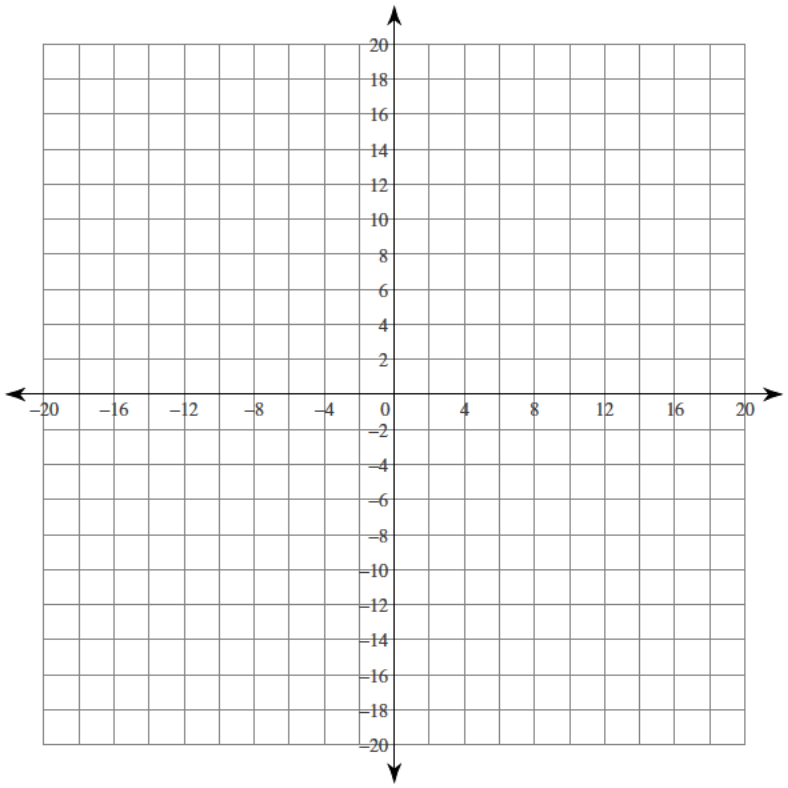
302) $-21x + 26 - 2y = 0$

$-3 - \frac{1}{2}x - \frac{1}{2}y = 0$

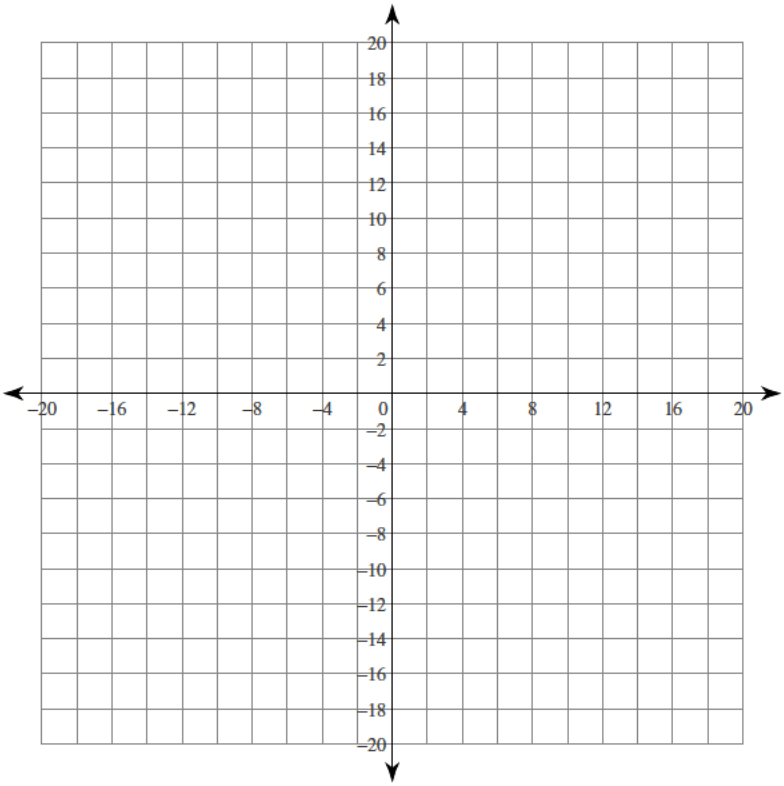


303) $39x = 972 + 54y$

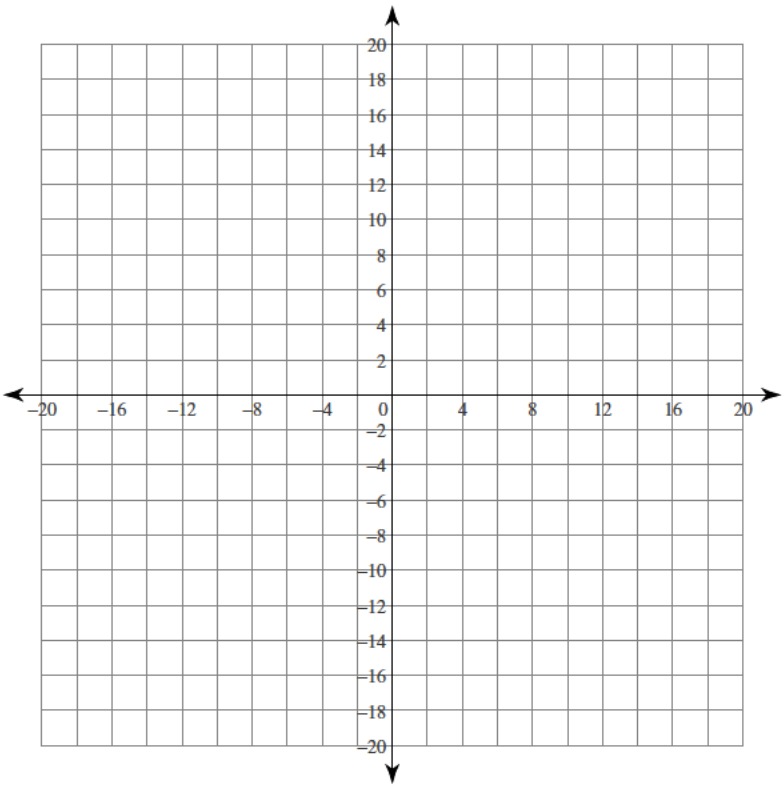
$2x + 9y + 9 = 0$



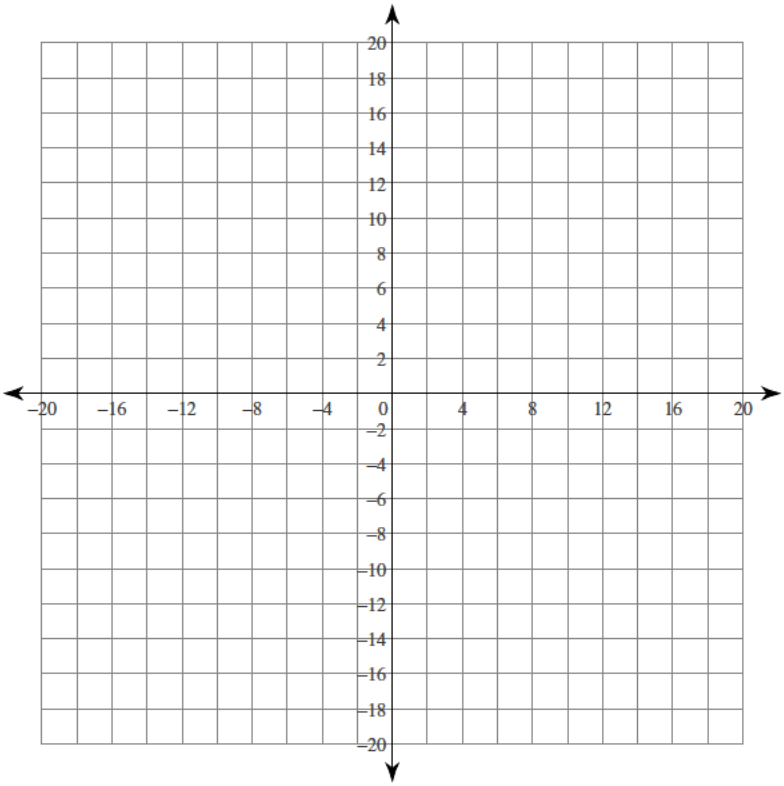
304) $y = -x + 1$
$0 = y + 13 - 6x$



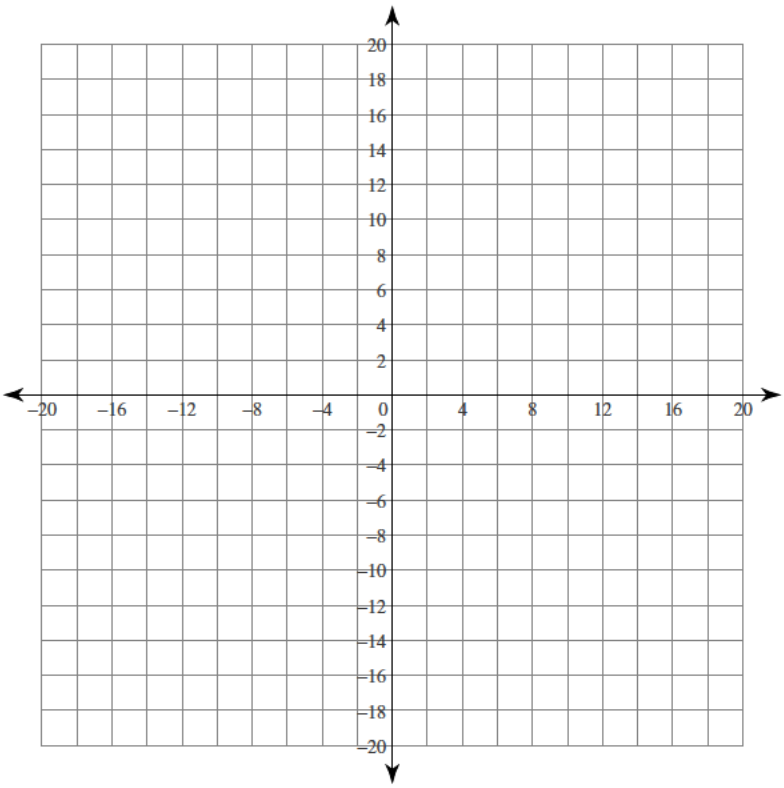
305) $26y = -12x - 104$
$221 + 15x = 13y$



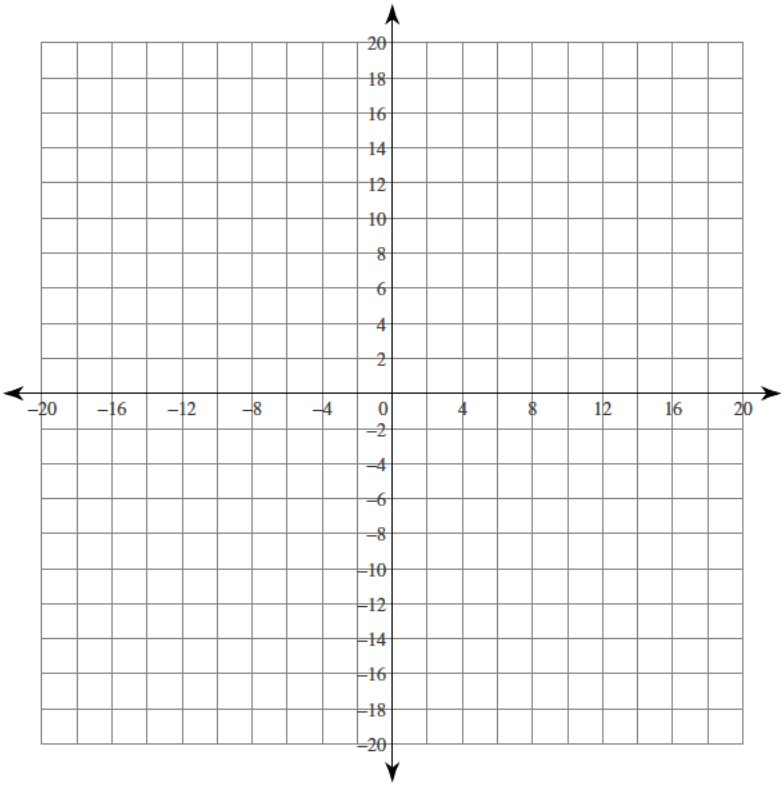
306) $20 - 2y = 5x$
$0 = y + 11 - 8x$



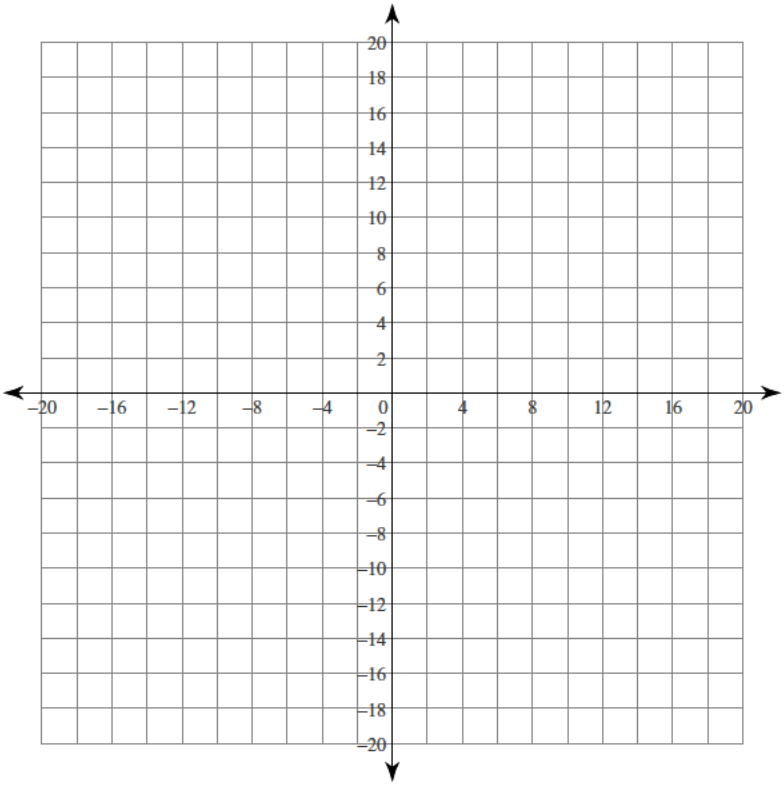
307) $-31x = -190 - 10y$
$-5y + 40 = -2x$



308) $126 - 14y = -x$
$0 = 28y + 54x + 532$

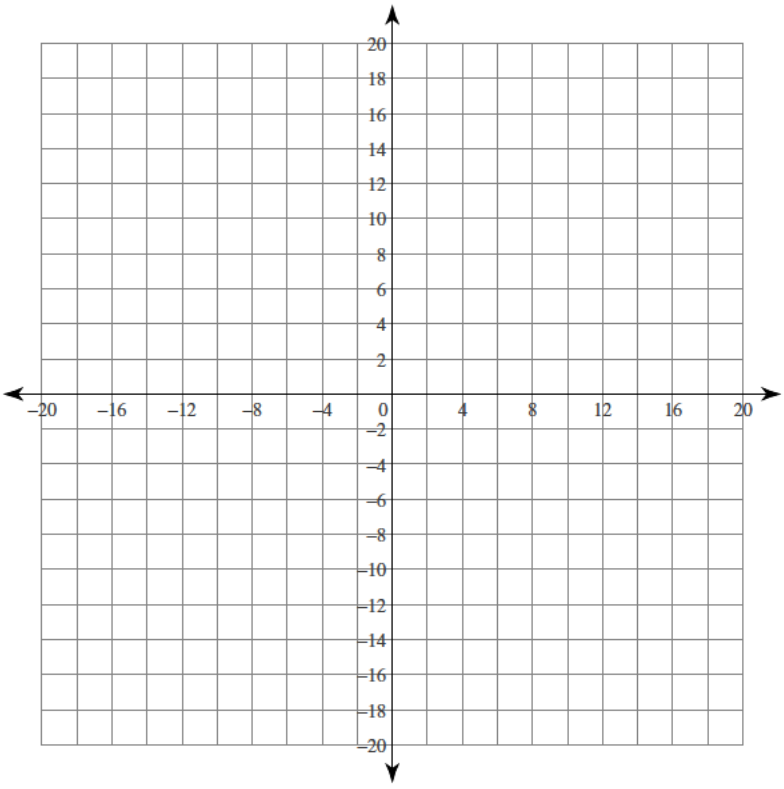


309) $-x = 170 - 10y$
$-10y = -17x - 10$



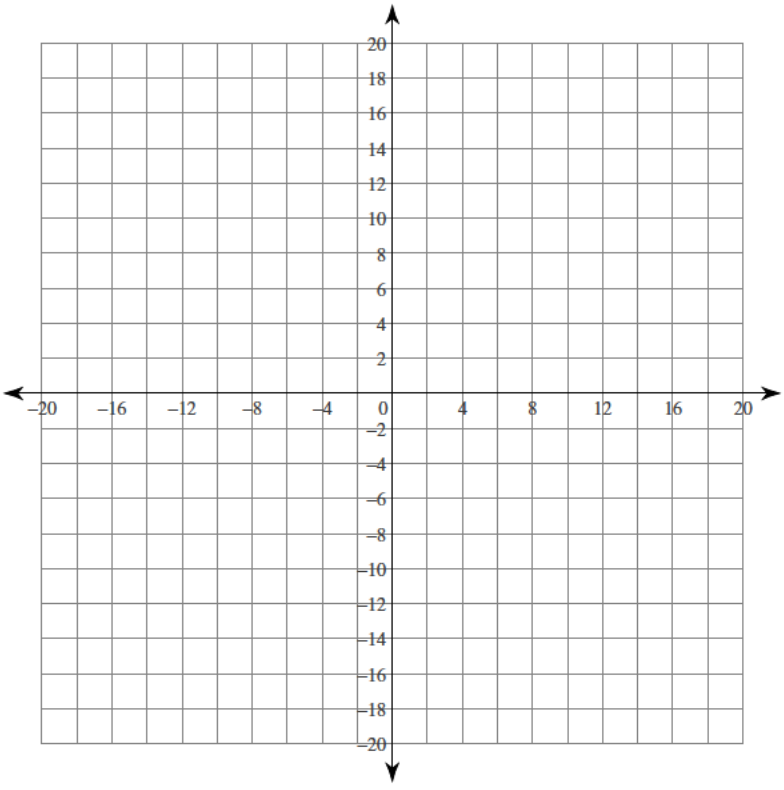
310) $0 = 3 + \frac{3}{119}x - \frac{3}{17}y$

$0 = -7y - 9x - 21$



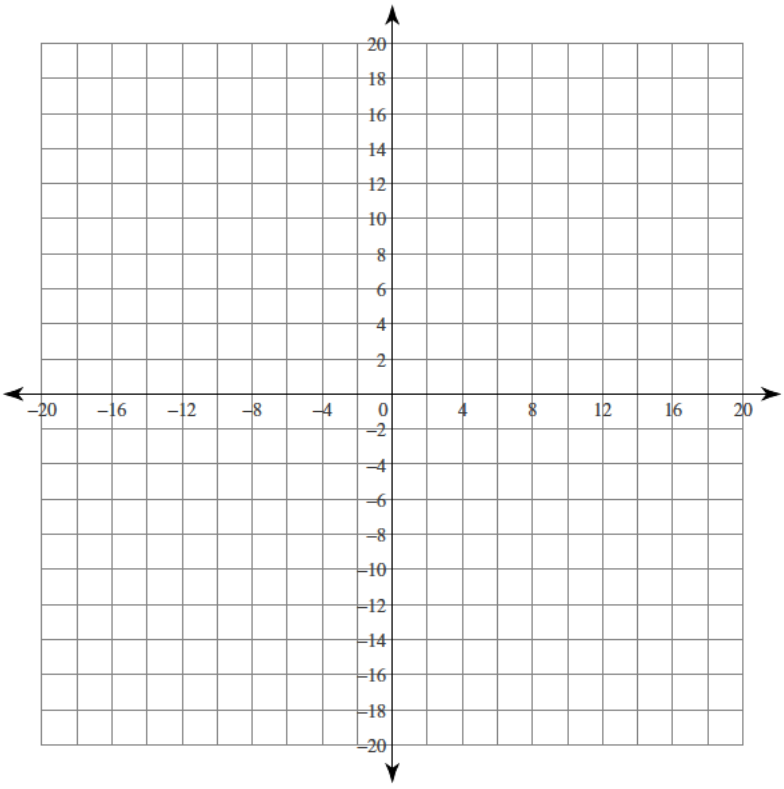
311) $13x = -9 - 9y$

$x - 9 = 0$



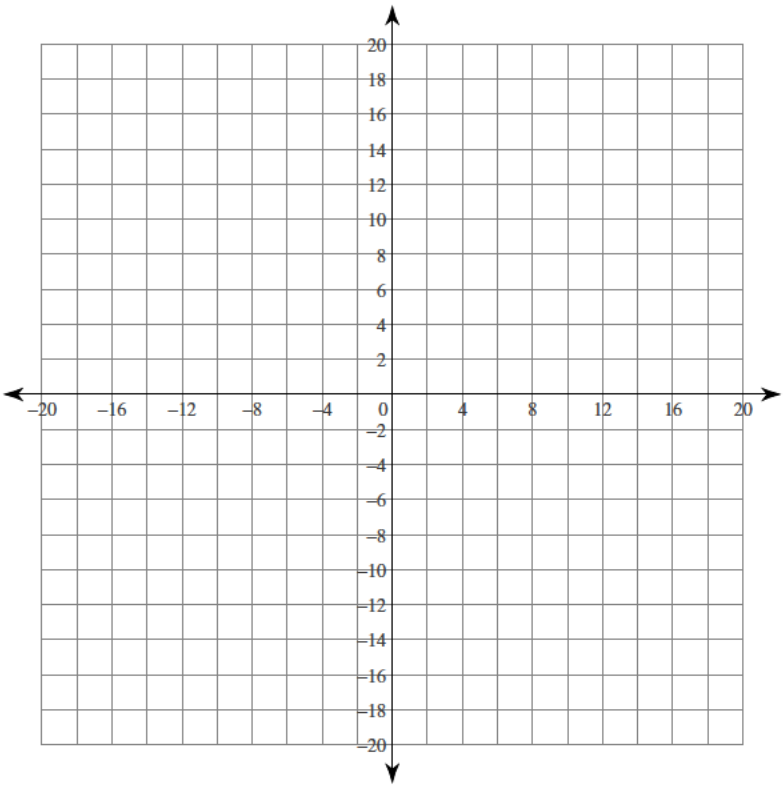
312) $9 + 7x = 3y$

$$-1 - \frac{1}{19}y = \frac{4}{57}x$$



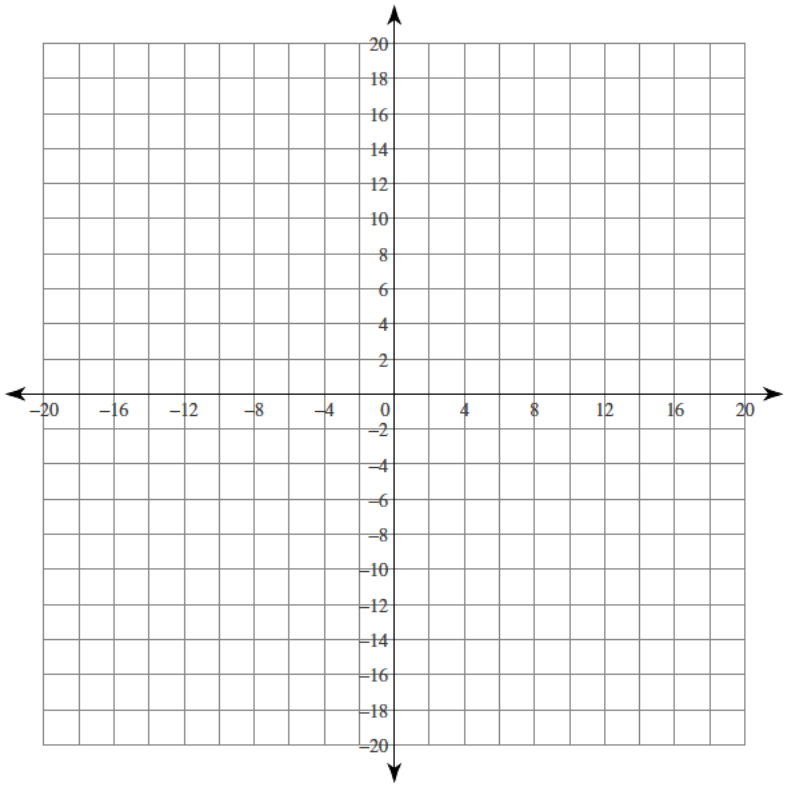
313) $867 = 75x + 51y$

$$-17y - 255 = -7x$$



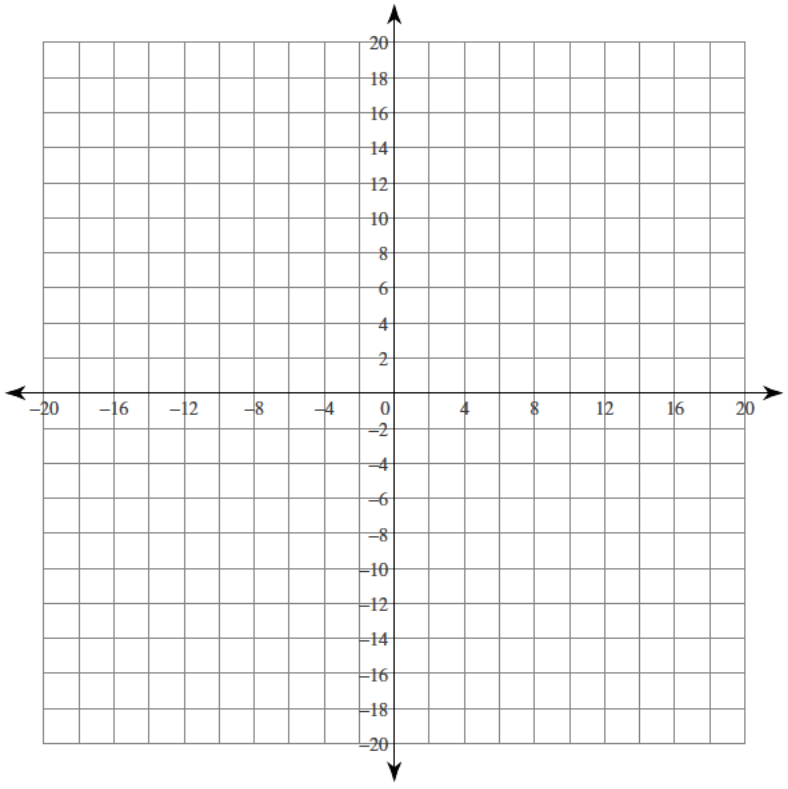
314) $-\frac{5}{78}x+\frac{1}{13}y=-1$

$6+6y=17x$

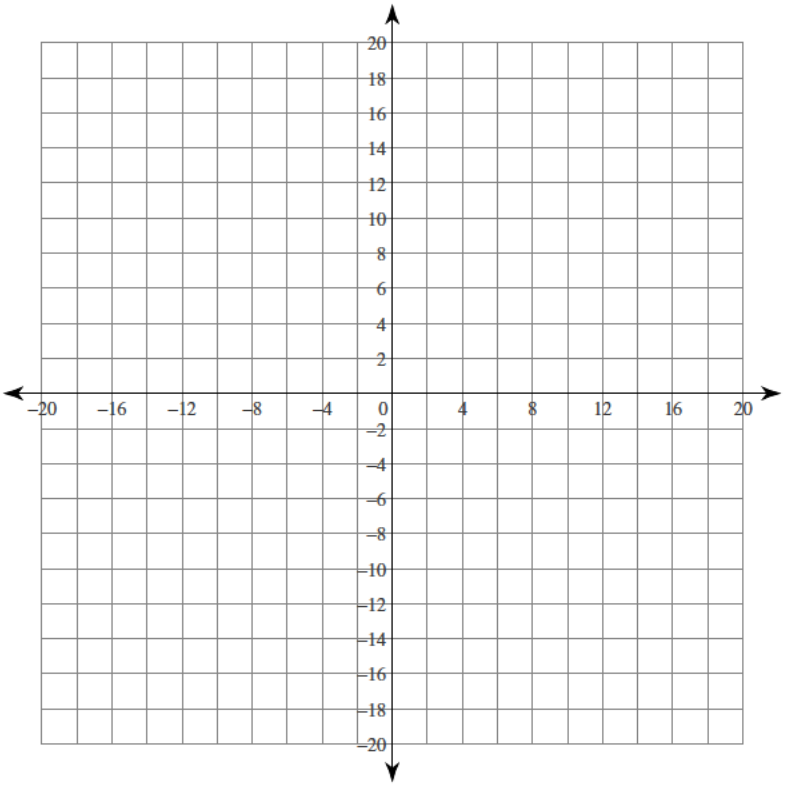


315) $-34+2y=7x$

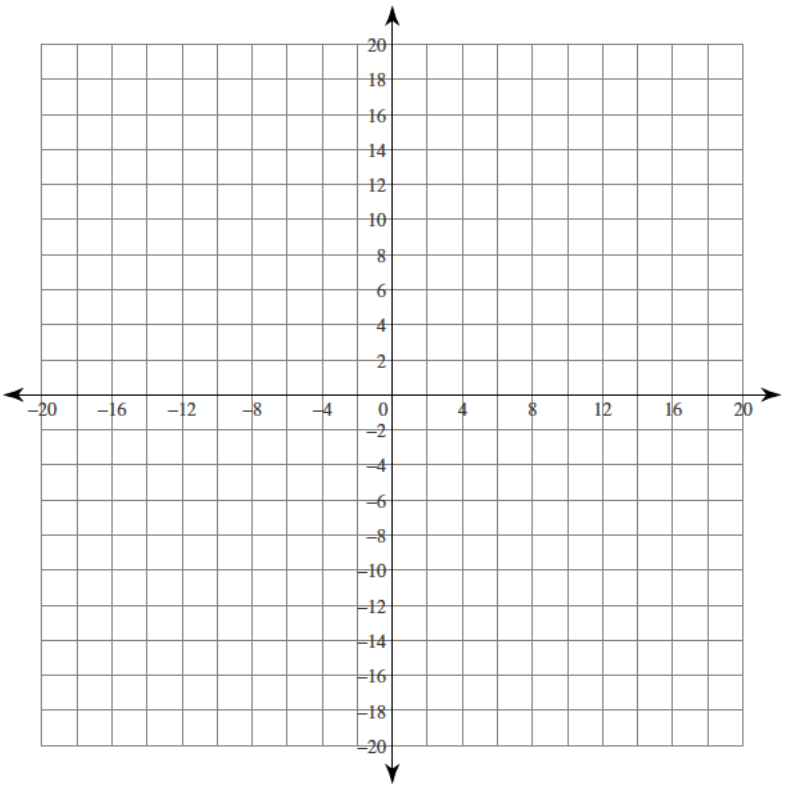
$-1=\frac{1}{8}y+\frac{1}{12}x$



316) $-51 = 17y - 2x$
$-646 + 40x = -34y$

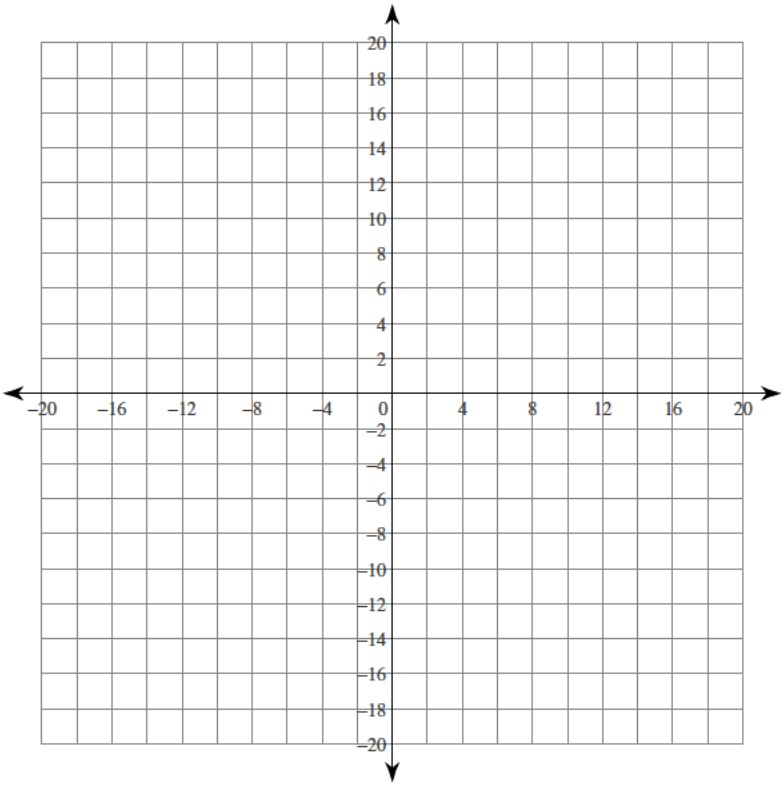


317) $-8 + 6x = -y$
$-1 - x + y = 0$



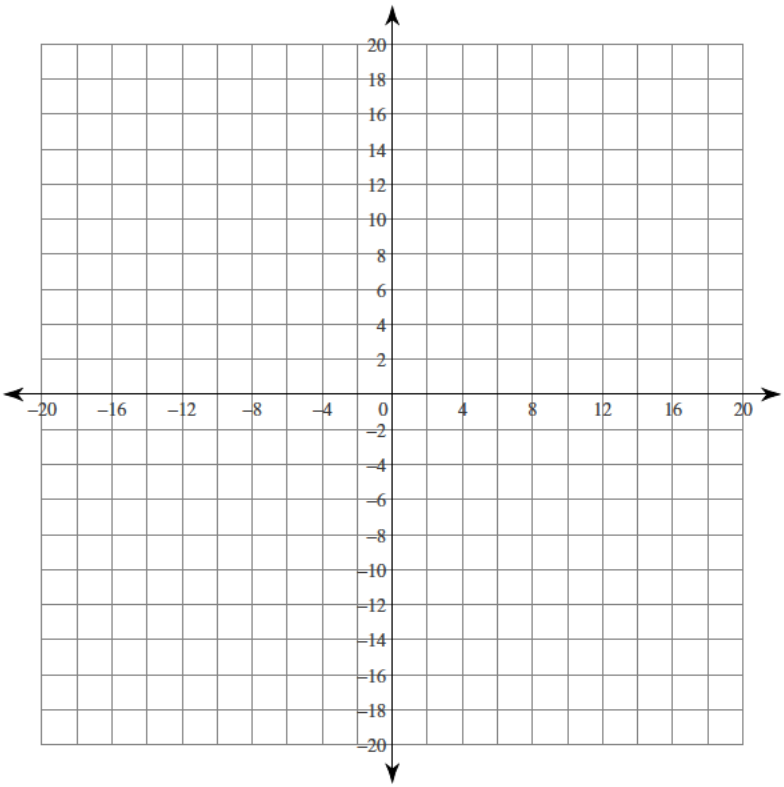
318) $8 = -y + 17x$

$0 = -y + 9$

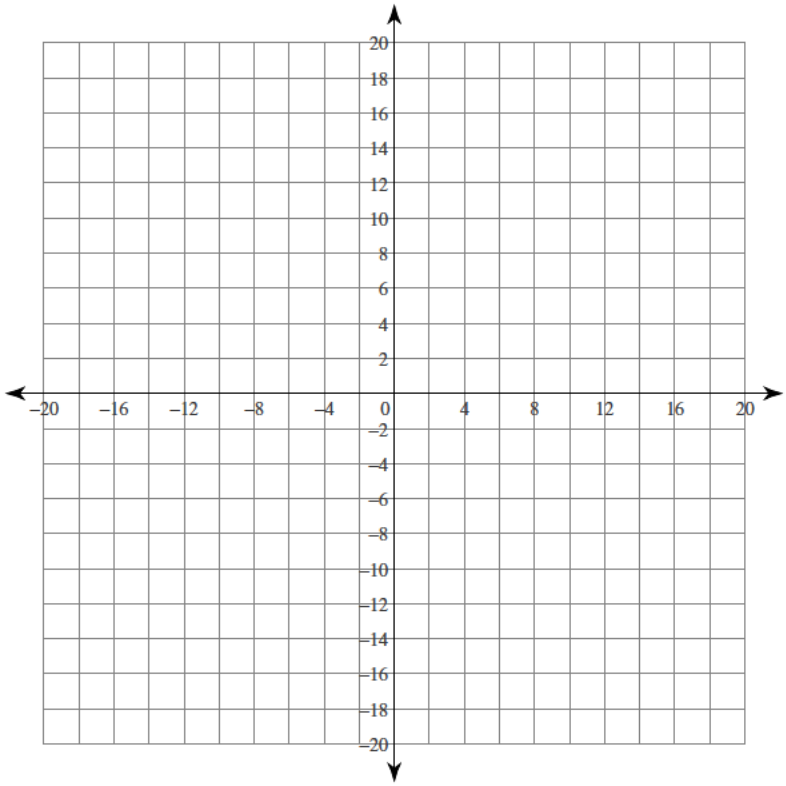


319) $0 = -5 - y + 20x$

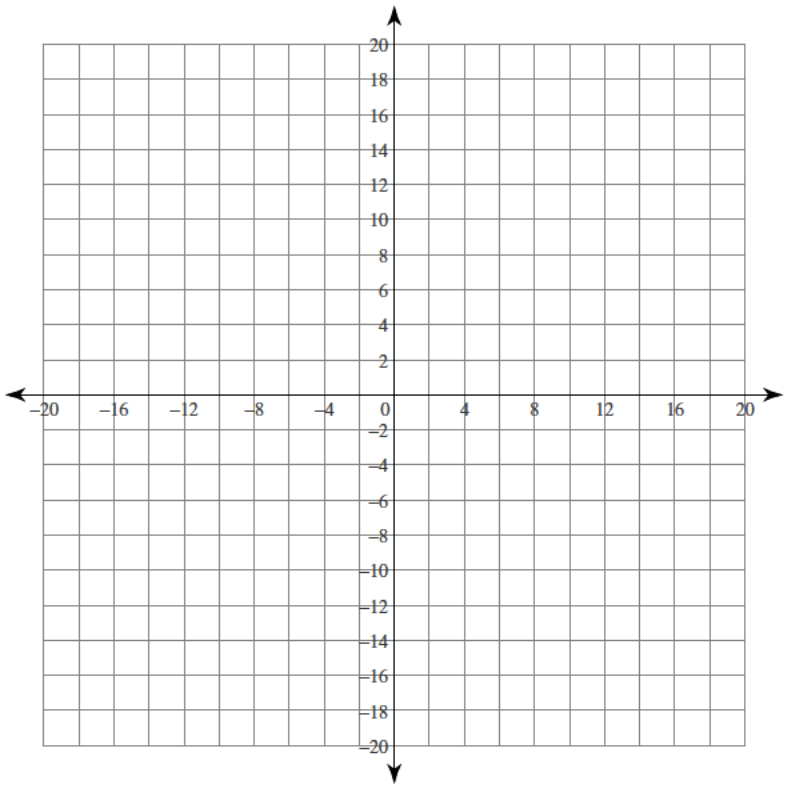
$\frac{1}{15}y = 1$



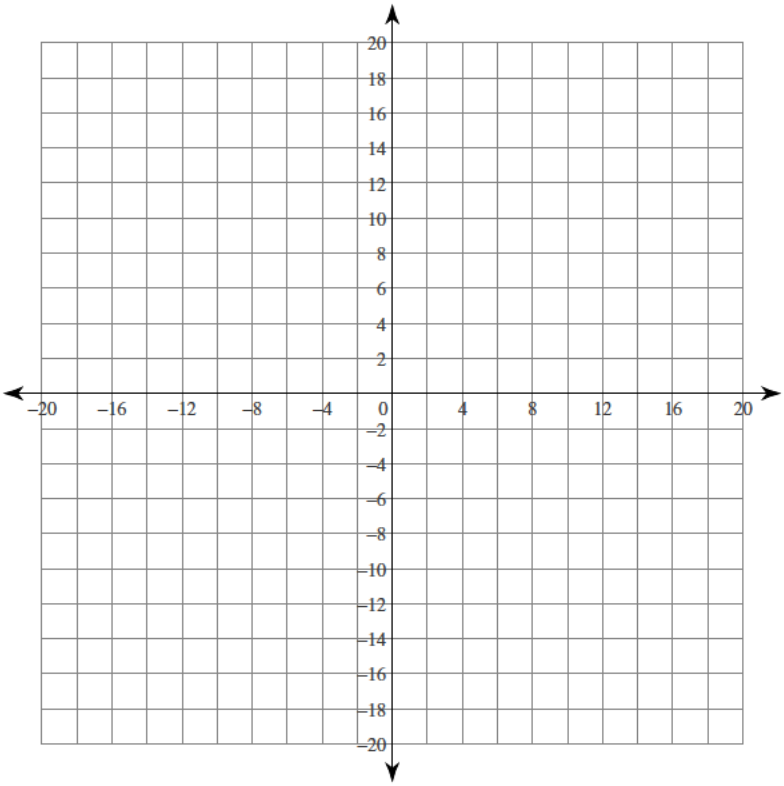
320) $-42 + 7y = -3x$
$-x + 7y = 98$



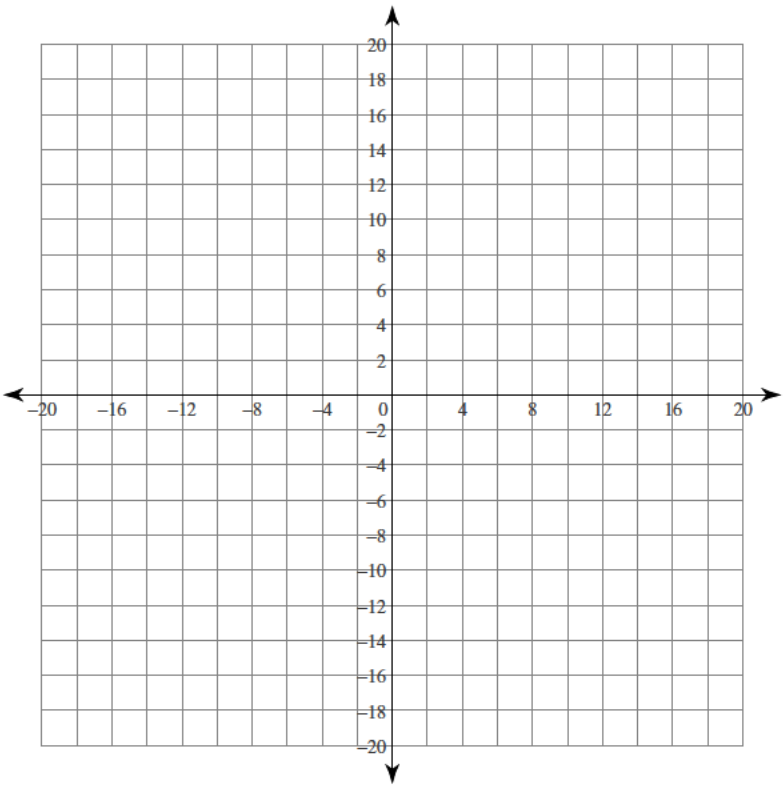
321) $-17 = -x$
$-153 = 17y - 14x$



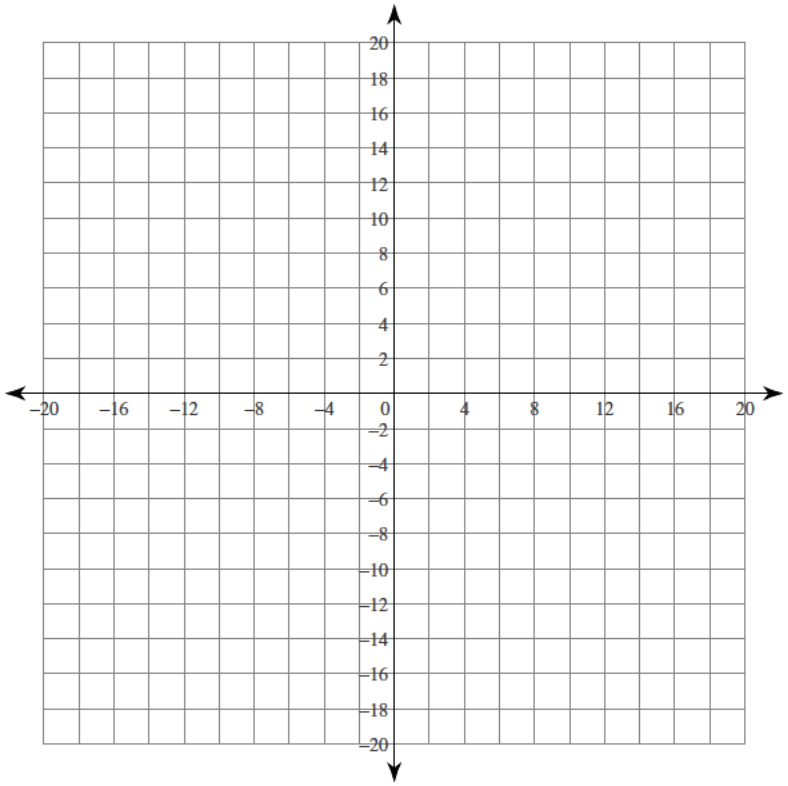
322) $-6x = -5y + 20$
$x = 27 + 3y$



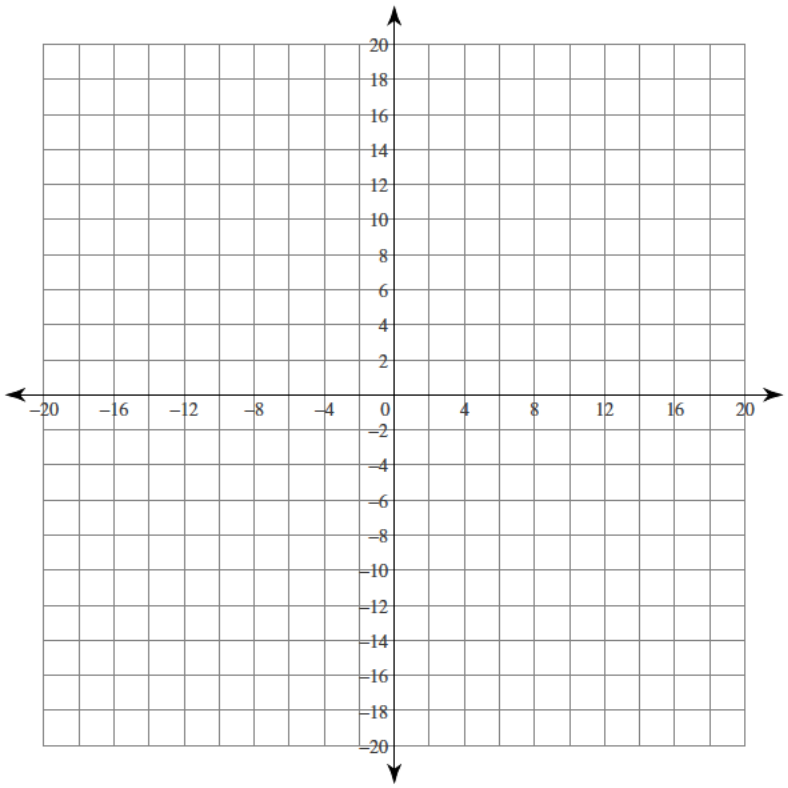
323) $27y = -324 - 15x$
$-81 = -9y - 26x$



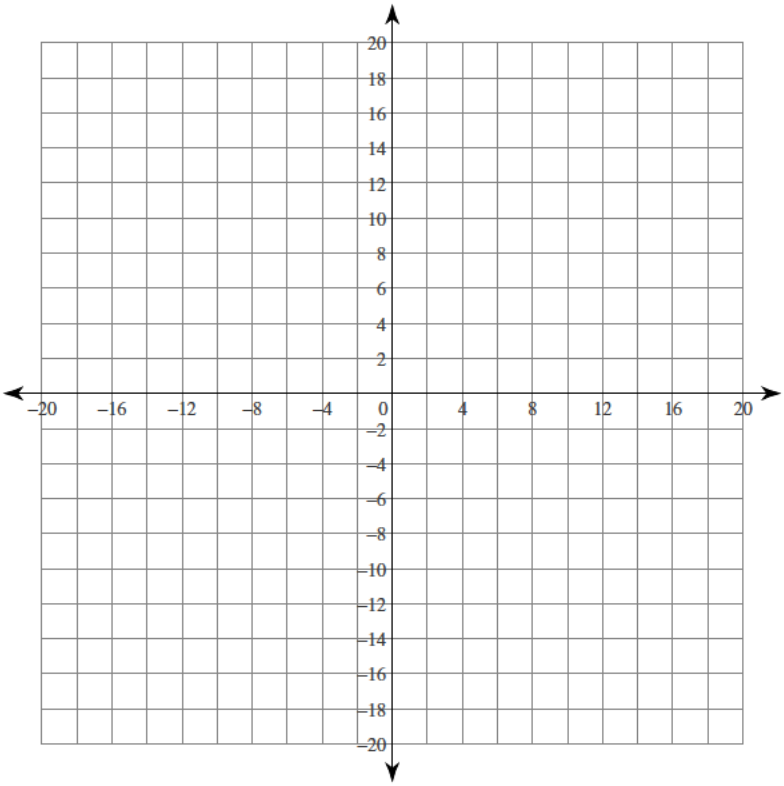
324) $-60 + 2x + 5y = 0$
$-15 - 15y = 19x$



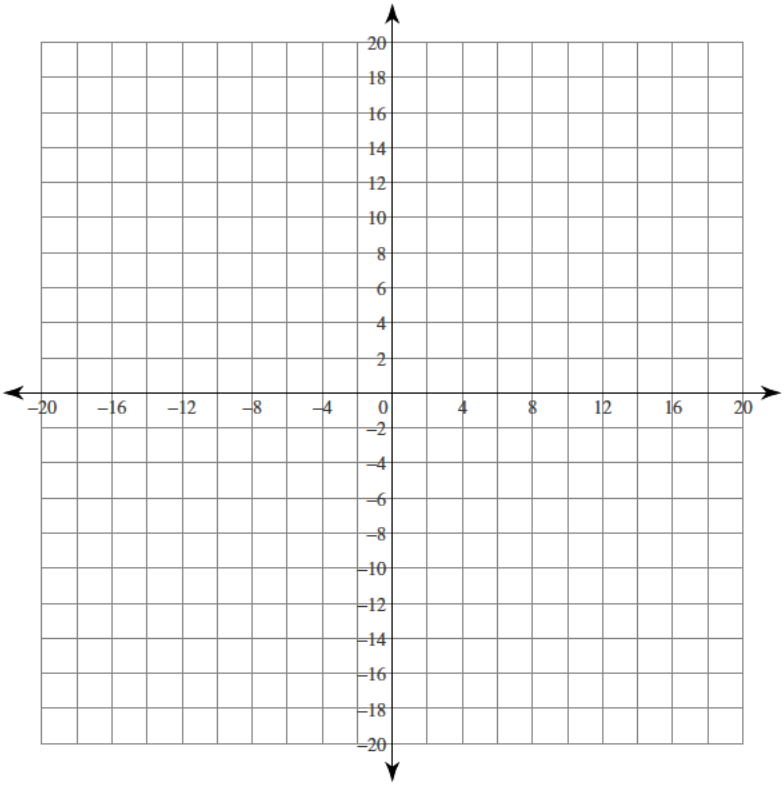
325) $9y = 5x - 144$
$29x - 162 + 9y = 0$



326) $0 = -133 - 11x - 7y$
$-18 + 3y = 6x$

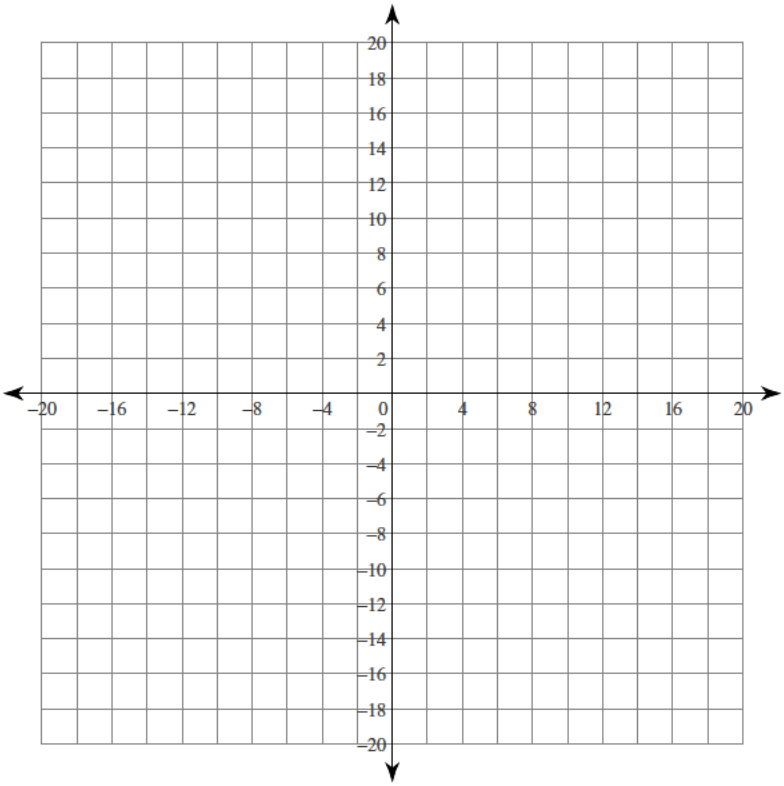


327) $-16 + x = 0$
$5x = 112 - 16y$



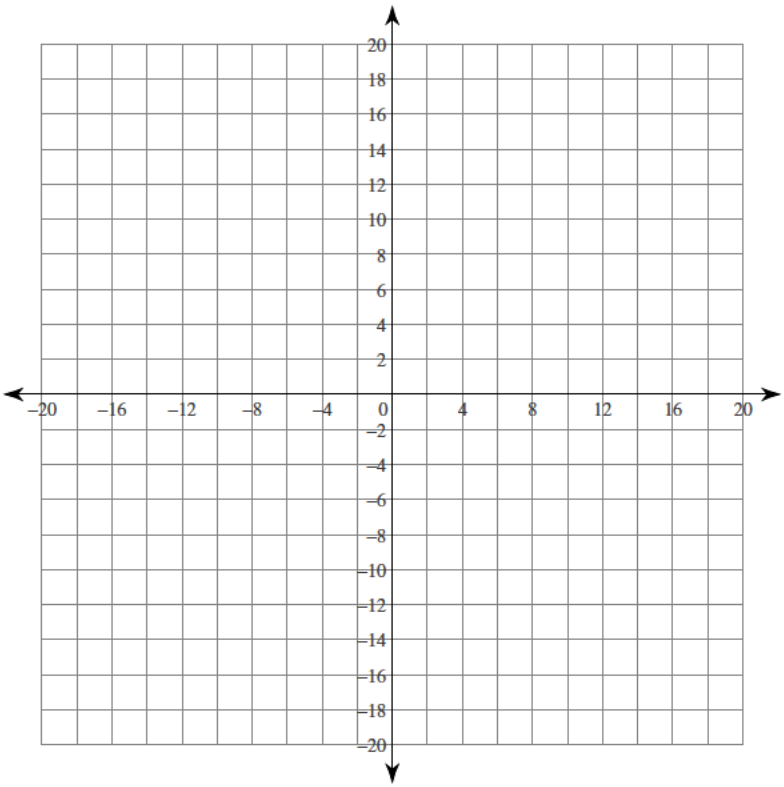
328) $8y = 104 - 17x$

$0 = -8y - 56 - 17x$



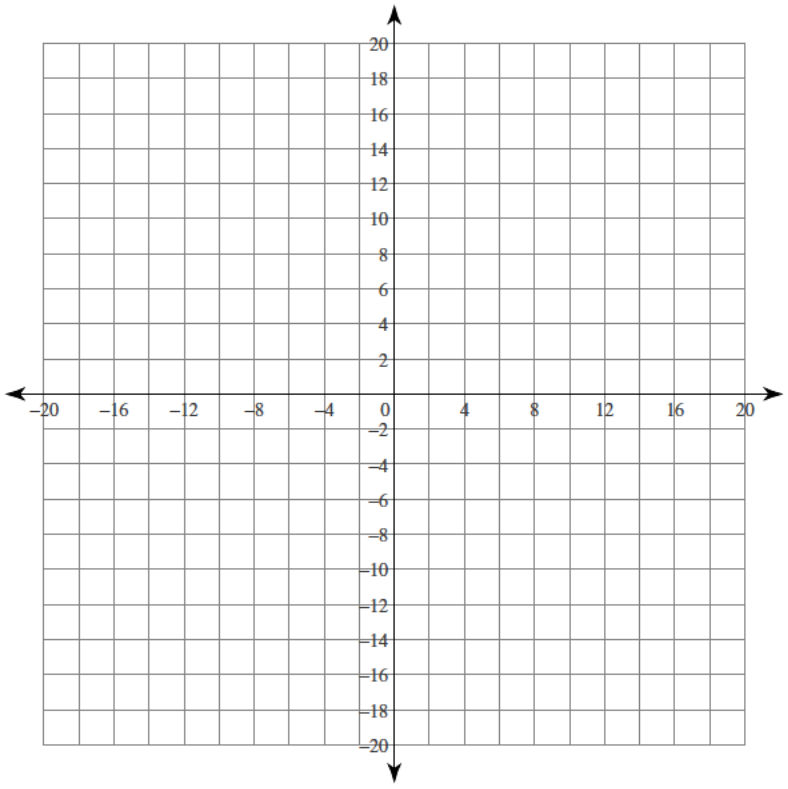
329) $-\frac{7}{16}y + \frac{105}{16} = -x$

$84 = -11x - 7y$



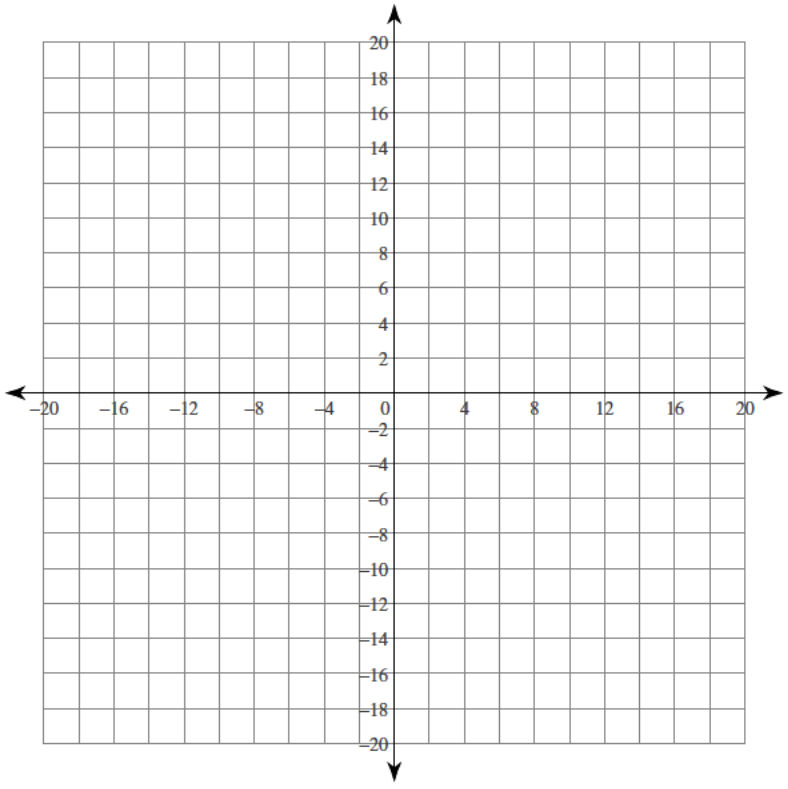
330) $y - 1 = \frac{1}{2}x$

$-224 + 5x = -16y$

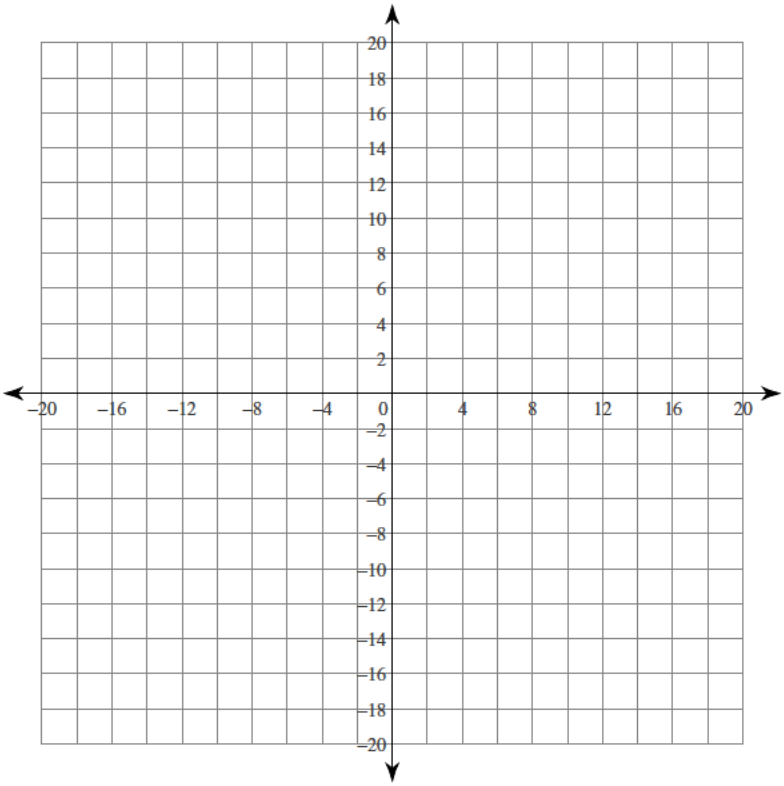


331) $-\frac{21}{2} + \frac{7}{10}y = x$

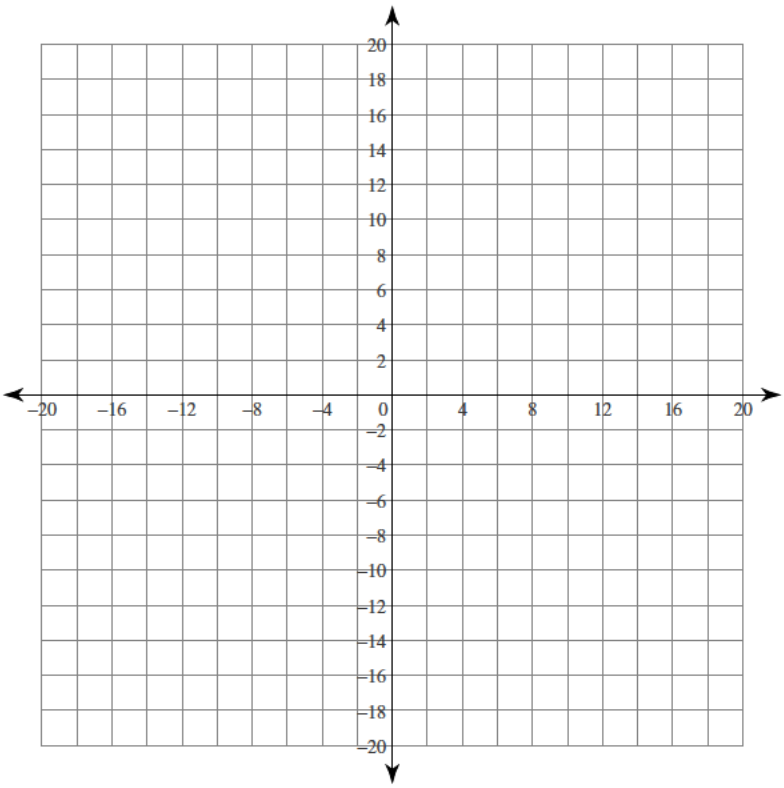
$2x + y = -9$



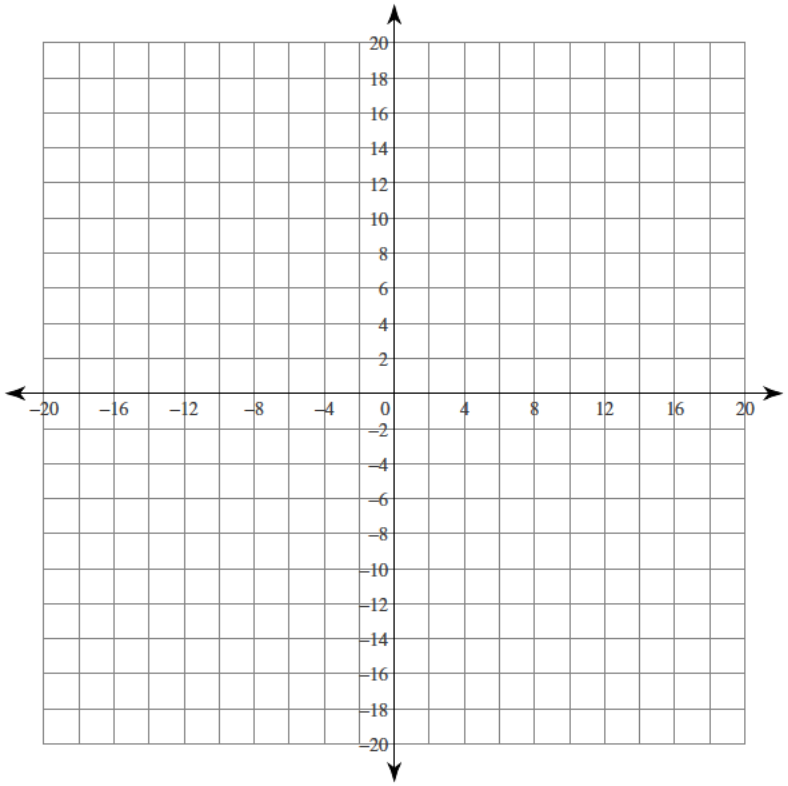
332) $-336 + 21y - 9x = 0$
$7y - 49 = 12x$



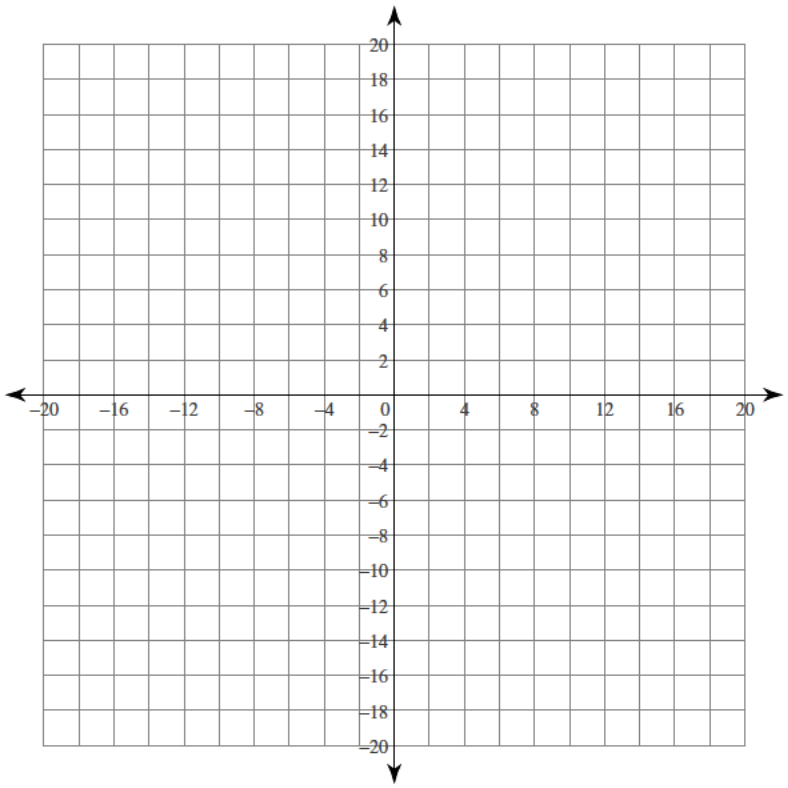
333) $-36 = -6x + 4y$
$-3x - 16y = -288$



334) $14 + y = 26x$
$y + 2x = 14$

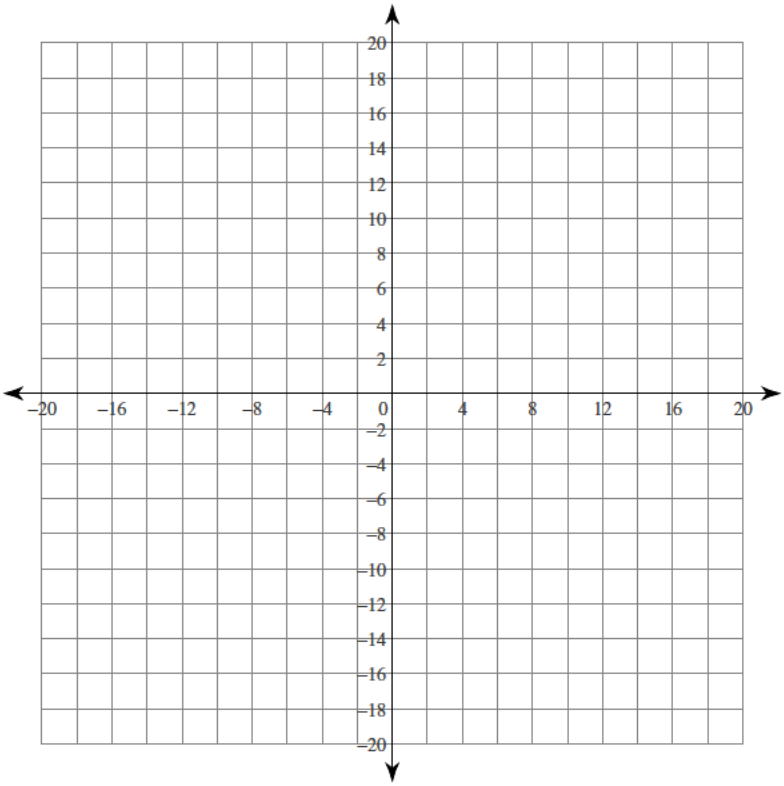


335) $0 = -165 - 15y + 6x$
$-20 = -5y + 7x$



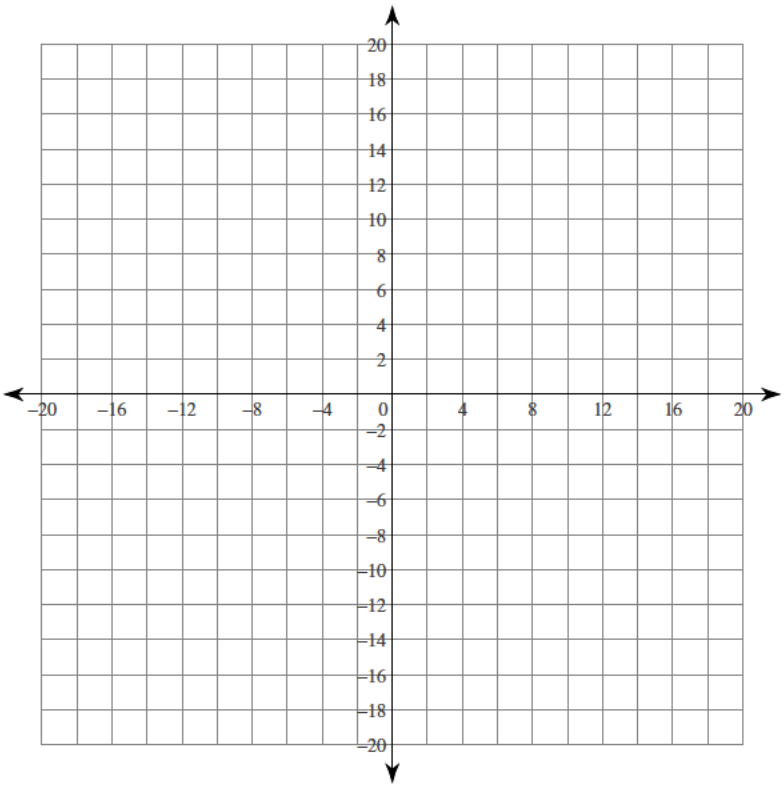
336) $0 = -21x + 16y - 272$

$8y + 5x = -112$

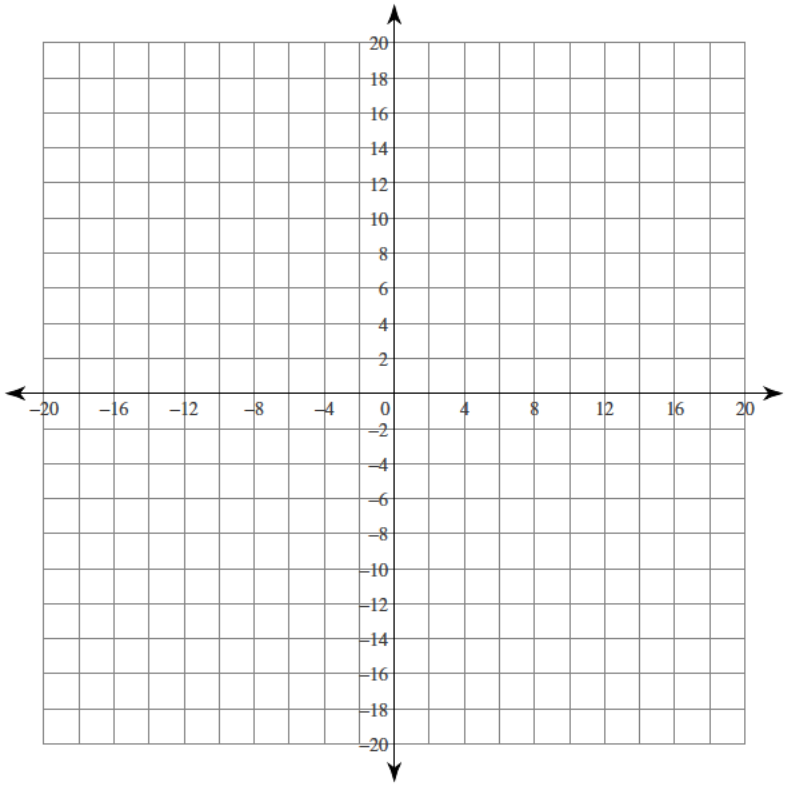


337) $-2 = y + \frac{5}{8}x$

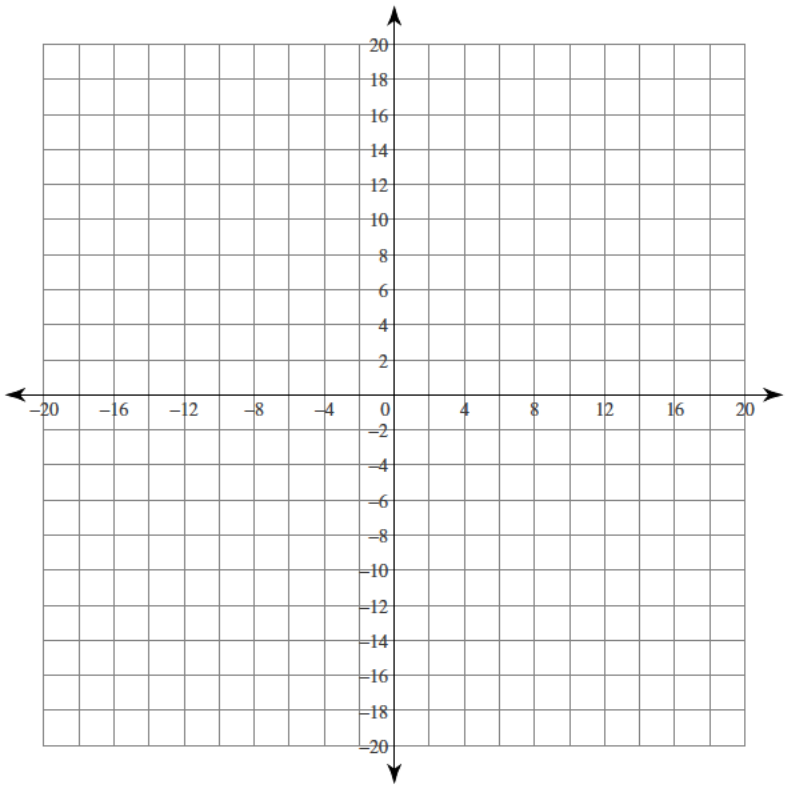
$24y = 144 - 15x$



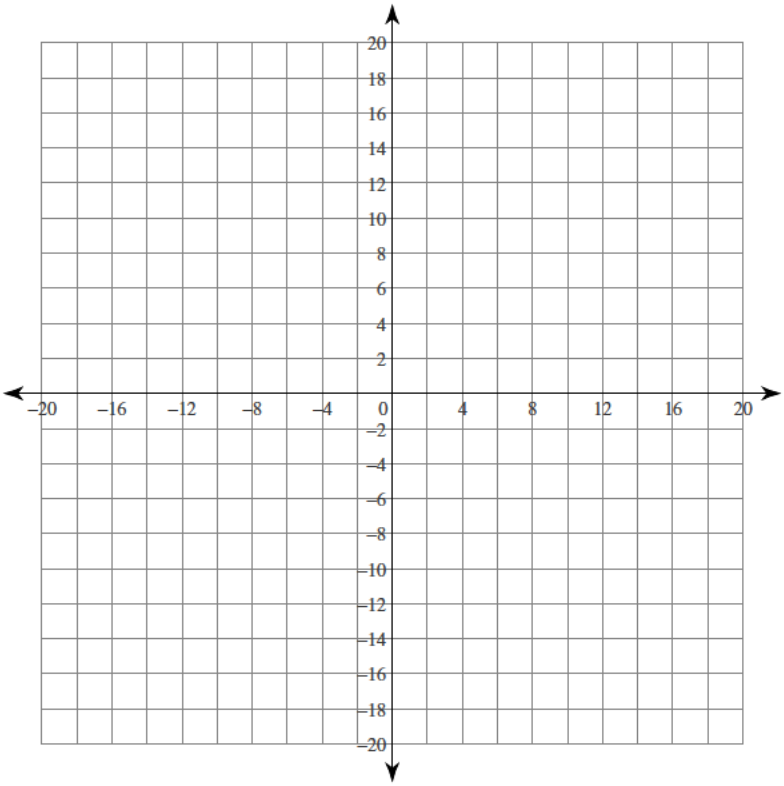
338) $18x = 15y - 105$
$-30y + 4x = 270$



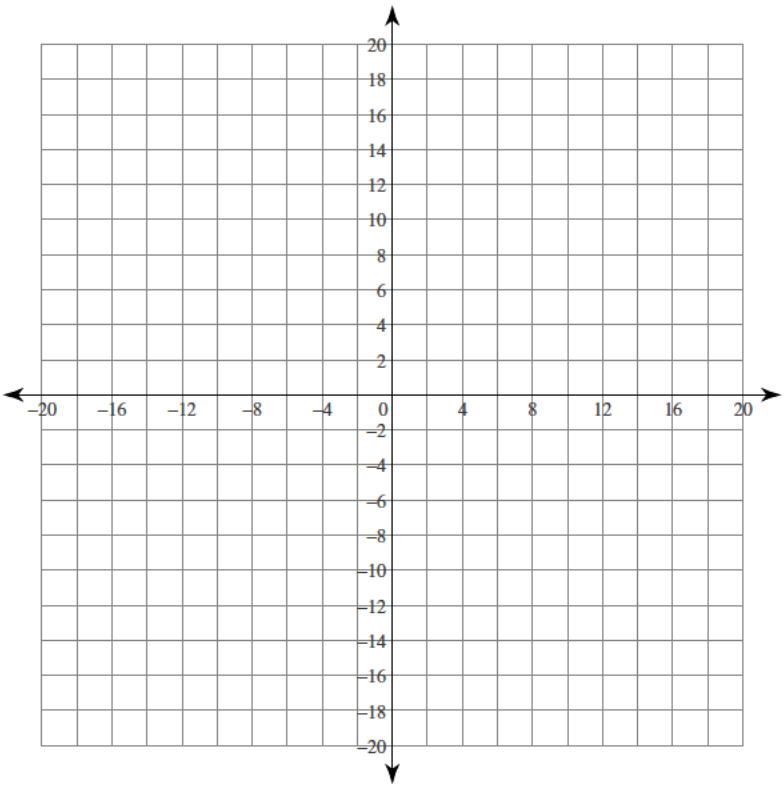
339) $-2y - 32 = -x$
$y + x = -10$



340) $8y - 5x = 56$
$24y = -168 - 27x$

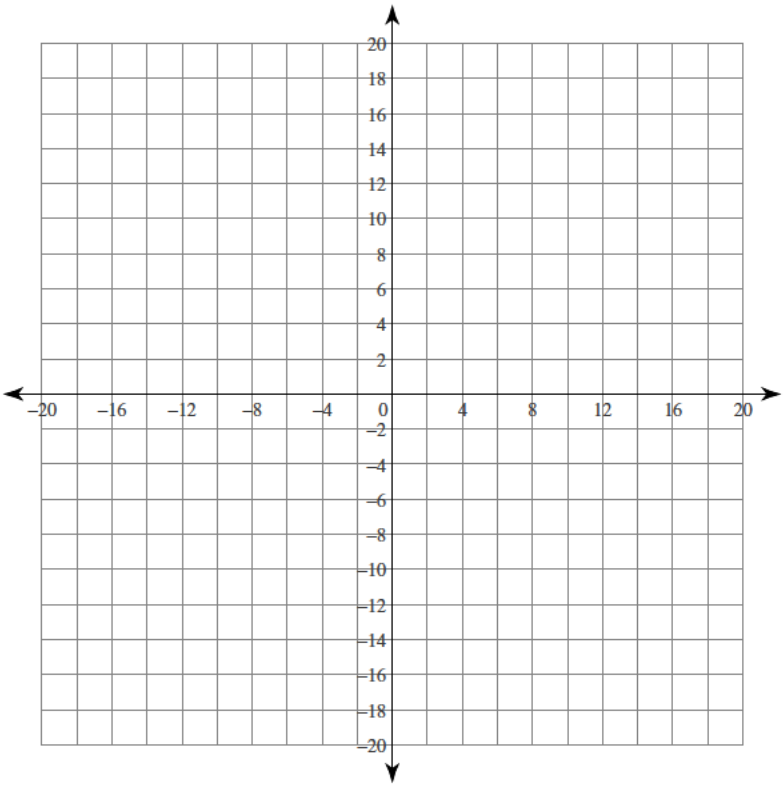


341) $2y + 3x = -6$
$60 + 3x = 4y$



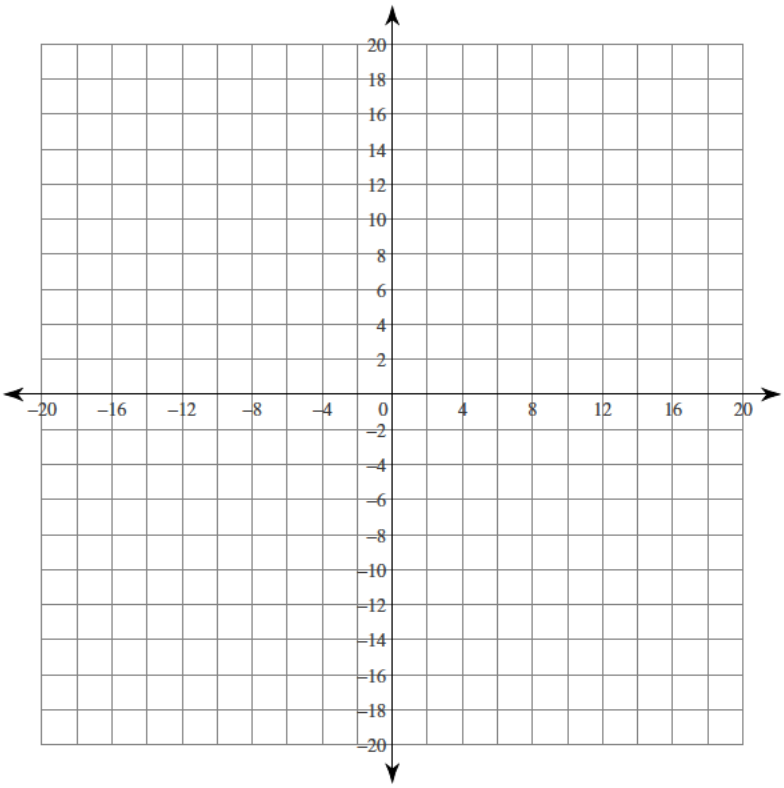
342) $0 = -12 - y + \frac{11}{8}x$

$-96 = -8y - 13x$



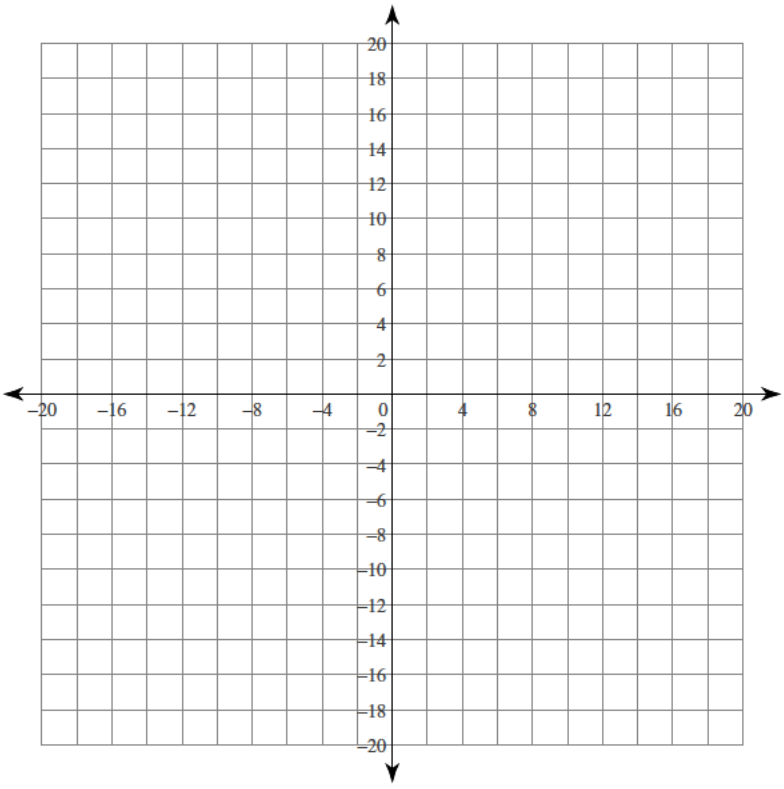
343) $-4y = -7x + 32$

$0 = 152 - 13x - 8y$



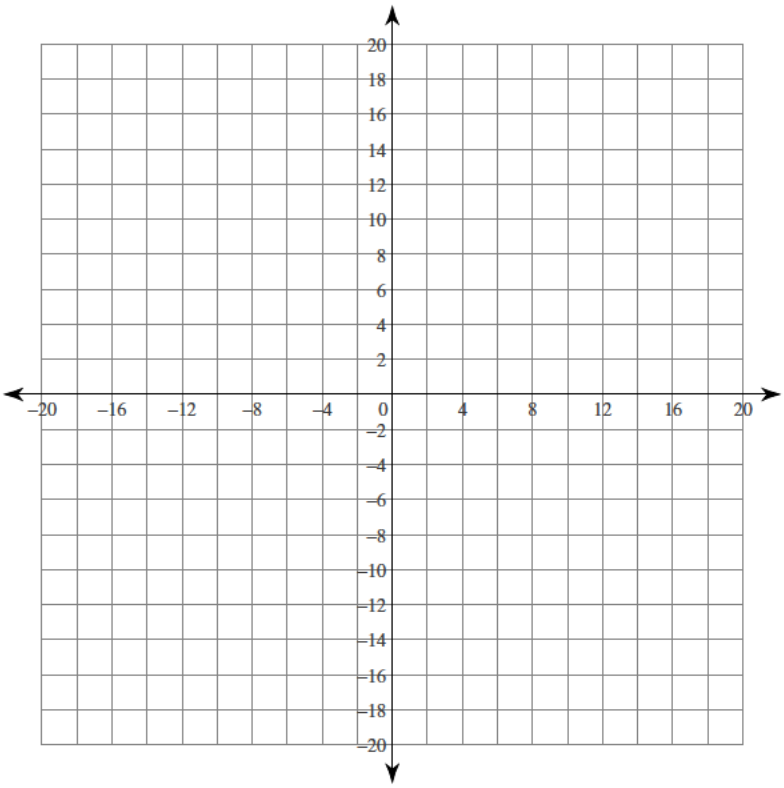
344) $-60 + x = -\frac{15}{4}y$

$-2x - 6 = -3y$



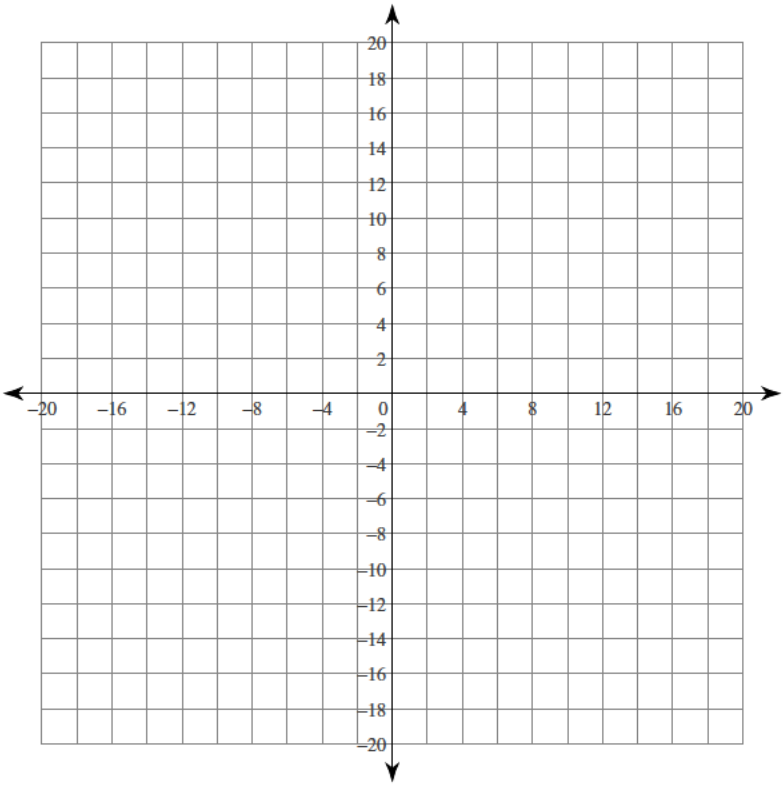
345) $0 = -13x - 90 + 15y$

$-15y = -2x - 255$



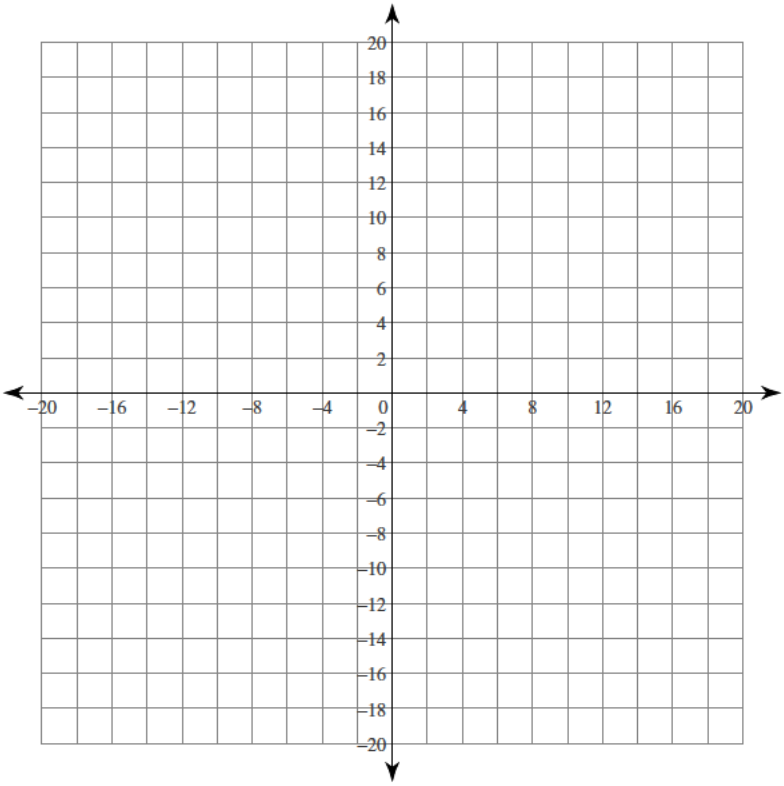
346) $15 + 25x = y$

$y = 25x + 11$



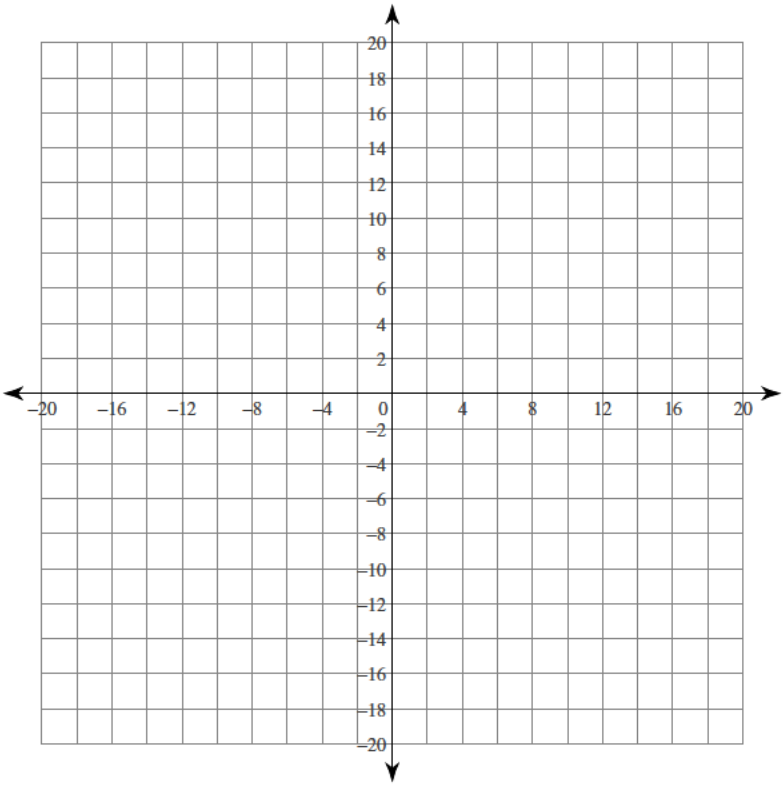
347) $190 = -19y - 7x$

$0 = -23x + 114 - 19y$



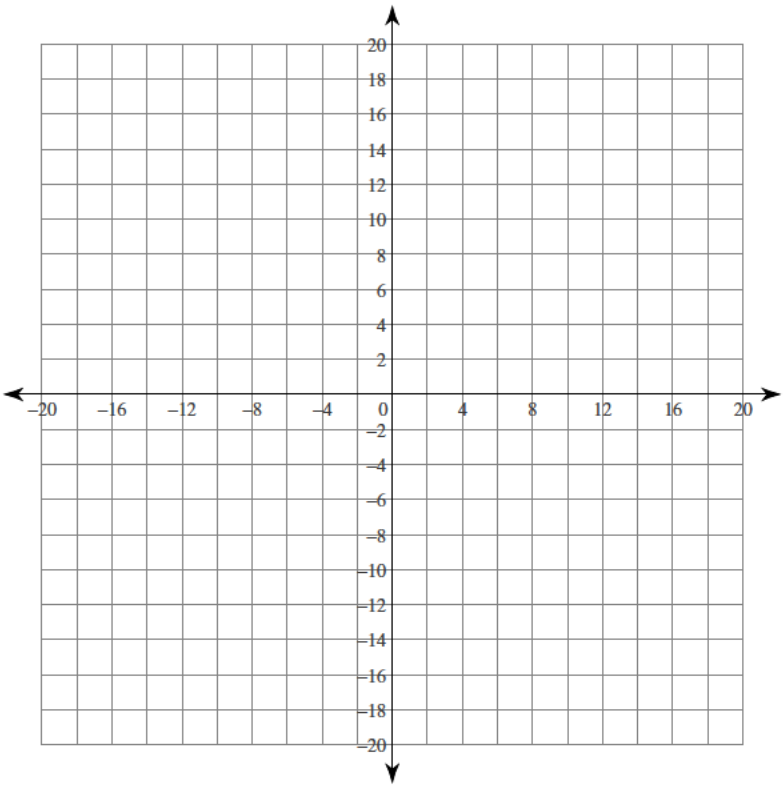
348) $-119 = -8x - 17y$

$-y = 19 + 2x$

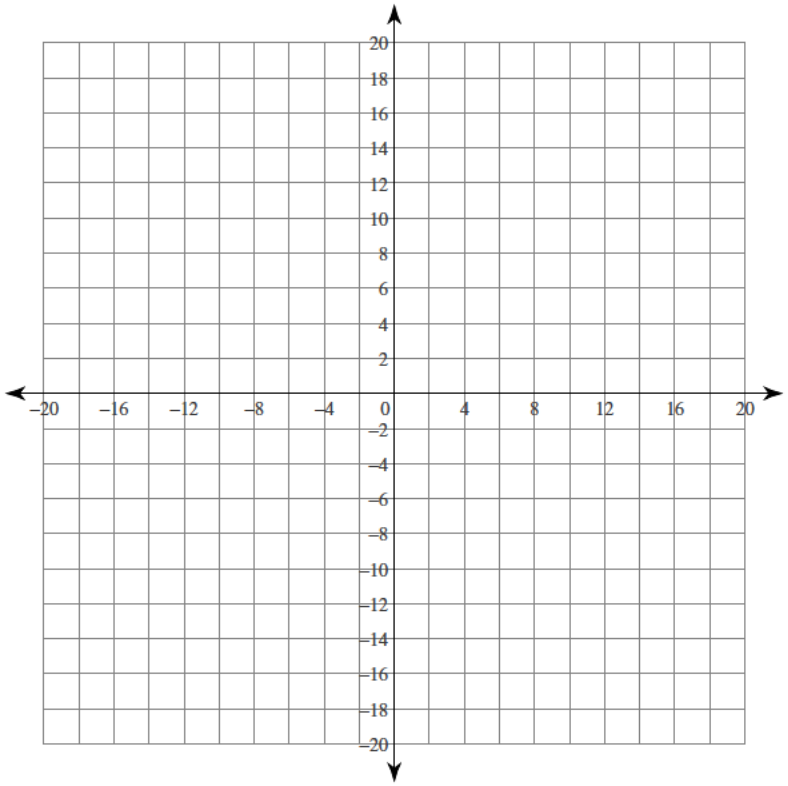


349) $-32 = 9x - 8y$

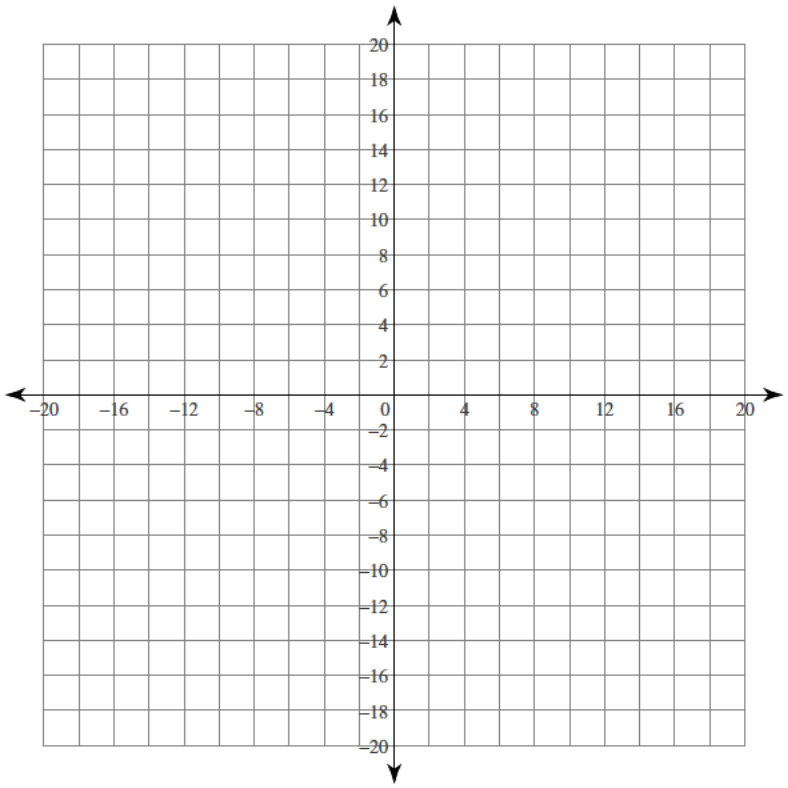
$-1 - \frac{1}{16}y + \frac{9}{128}x = 0$



350) $0 = 21y - 273 + 51x$
$-9x + 91 + 7y = 0$

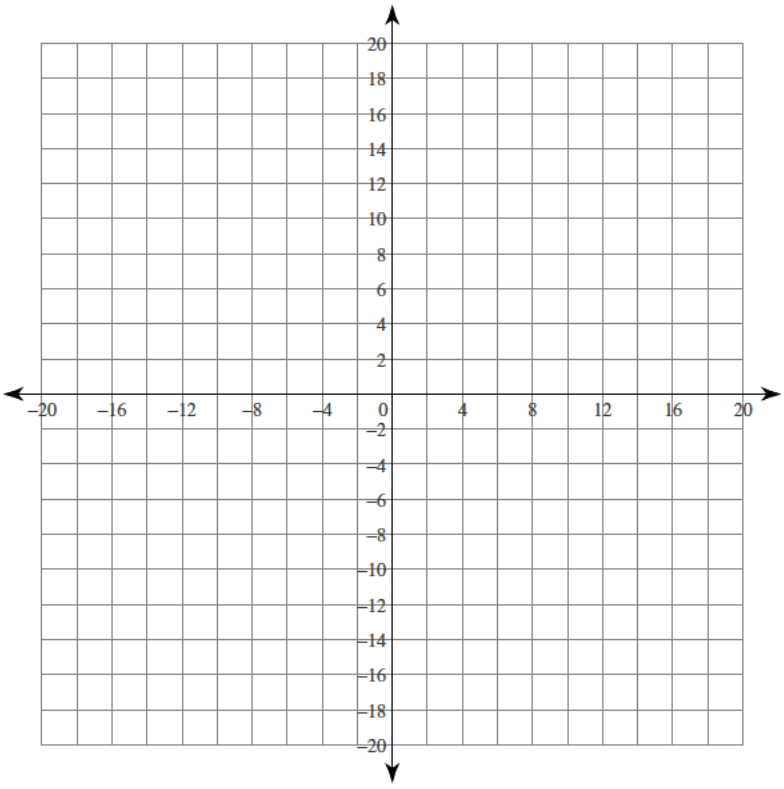


351) $4y + 76 + 3x = 0$
$288 = -25x + 16y$



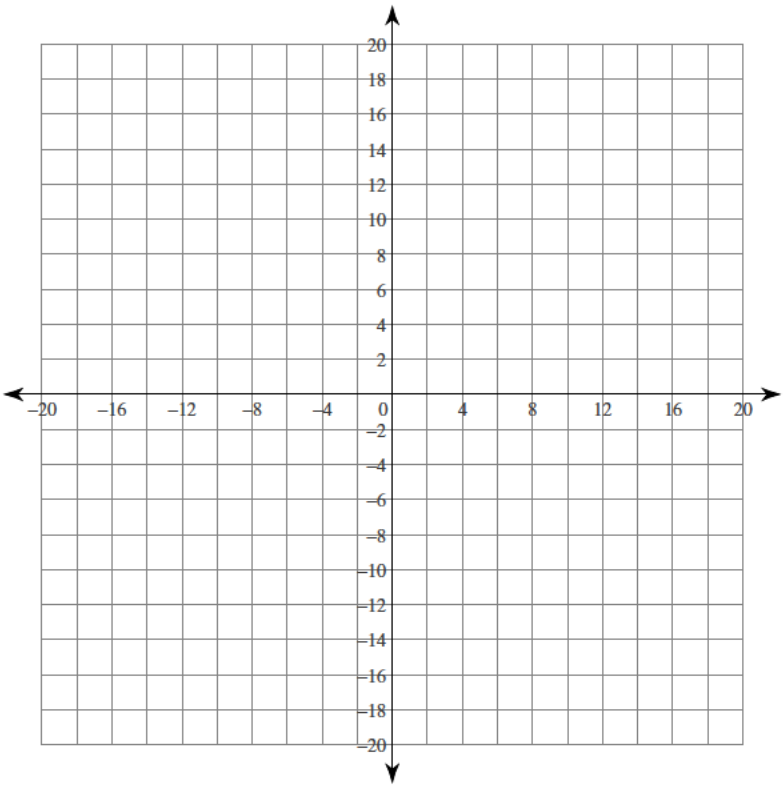
352) $\frac{15}{256}x + \frac{1}{16}y = -1$

$104 = -7x + 8y$



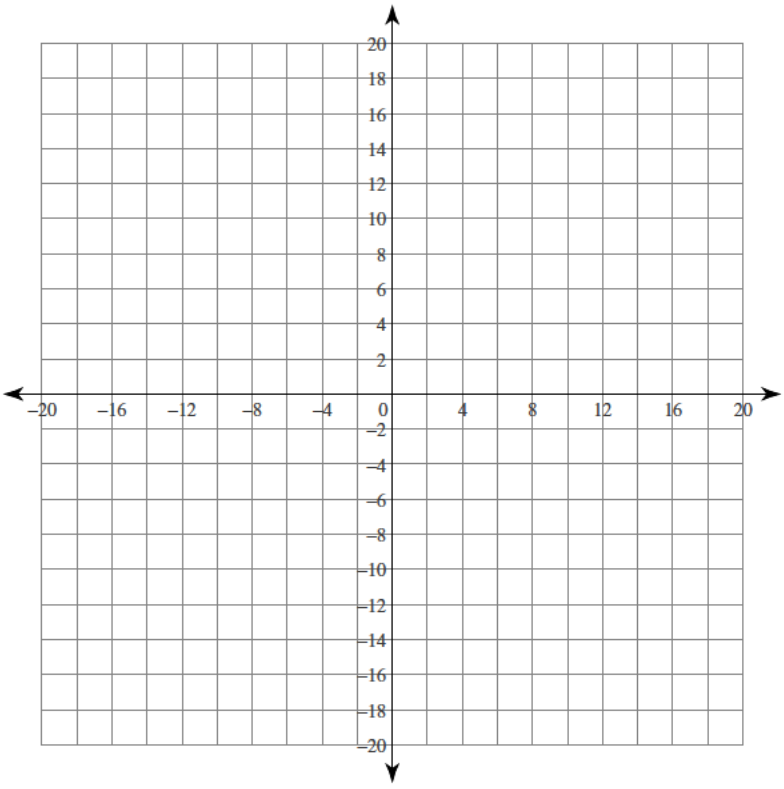
353) $-9x + 42 = -7y$

$0 = -7y + 49 - 4x$



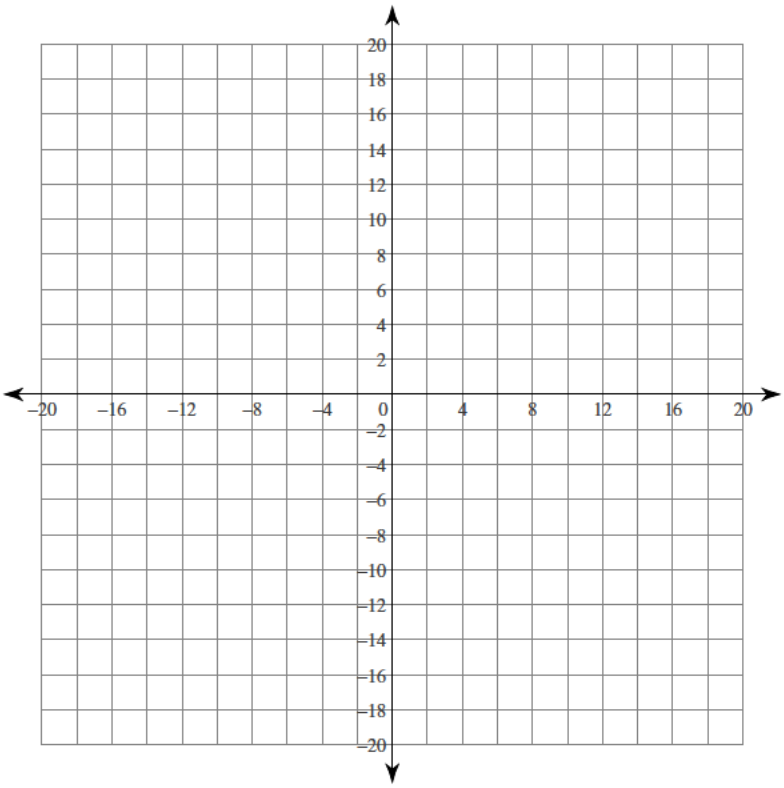
354) $0 = -49 - 7y + 16x$

$\frac{6}{7}x = 15 - y$



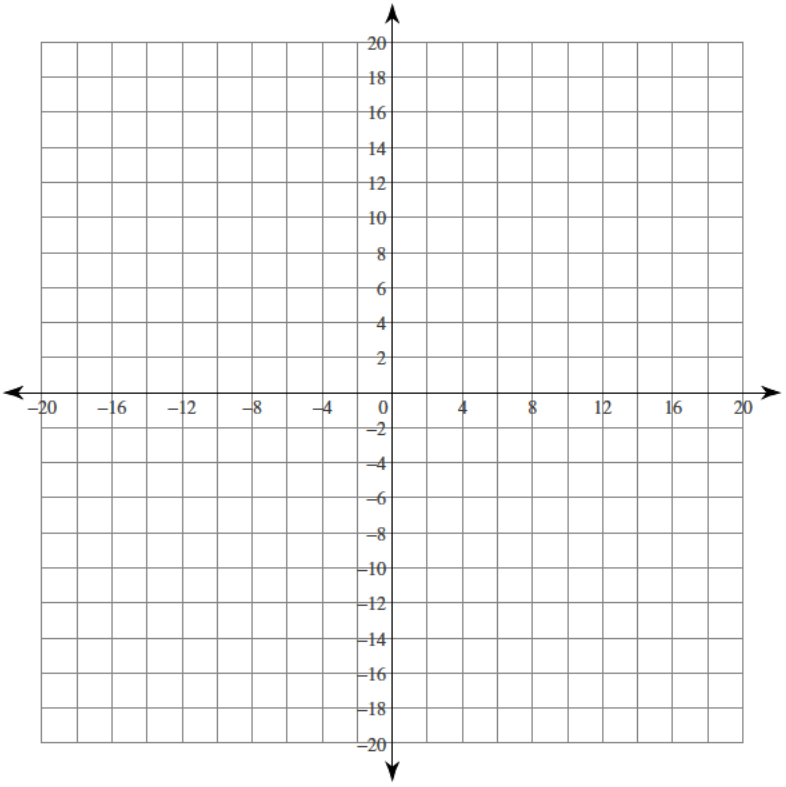
355) $31x + 171 = -9y$

$-126 = -10x - 18y$



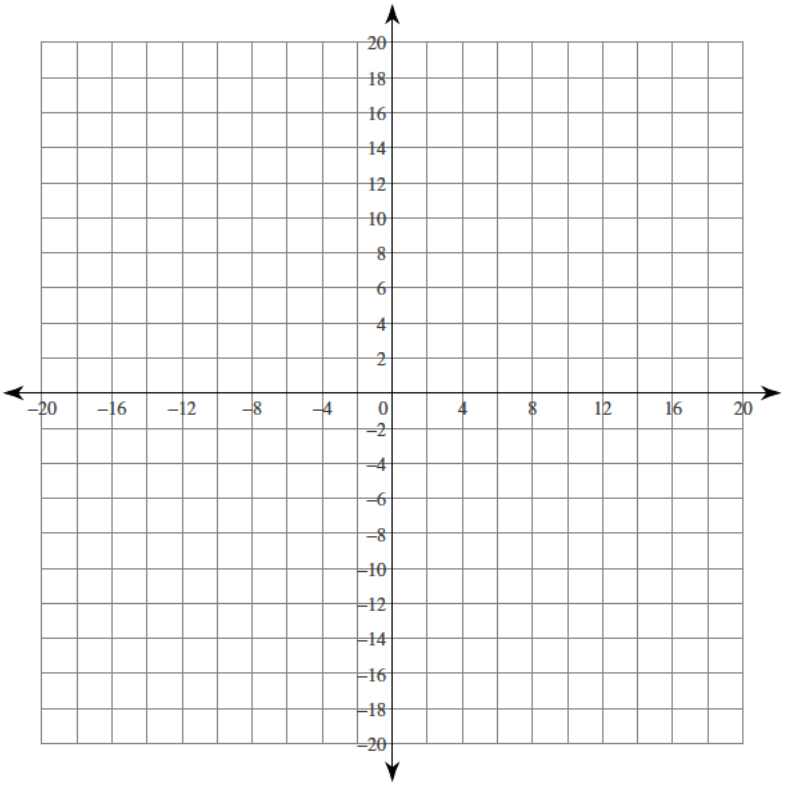
356) $-\frac{1}{11}y+\frac{5}{99}x=-1$

$y+18=-\frac{8}{3}x$

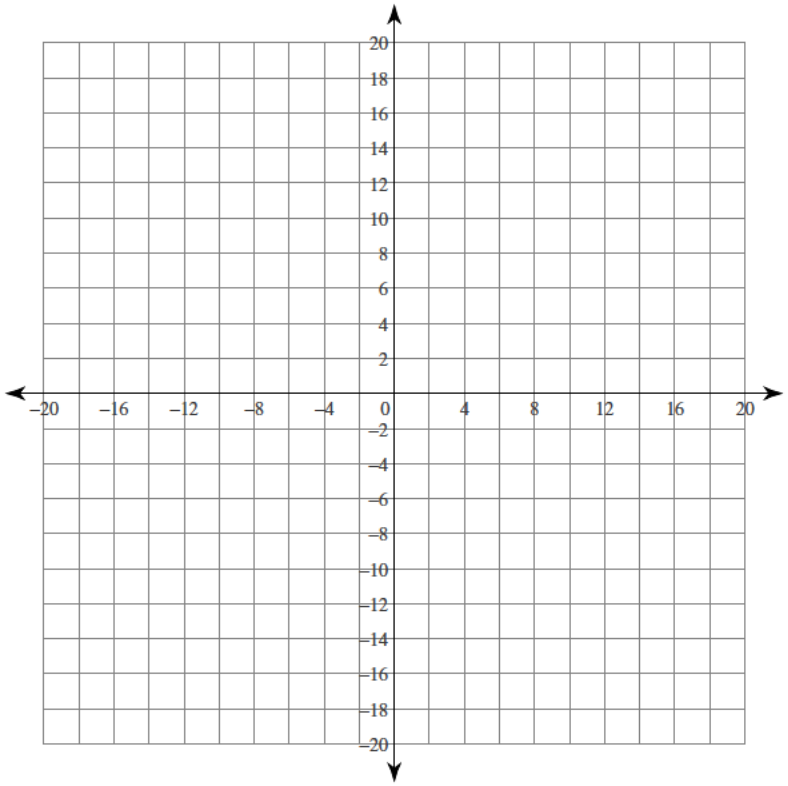


357) $-133=-x+7y$

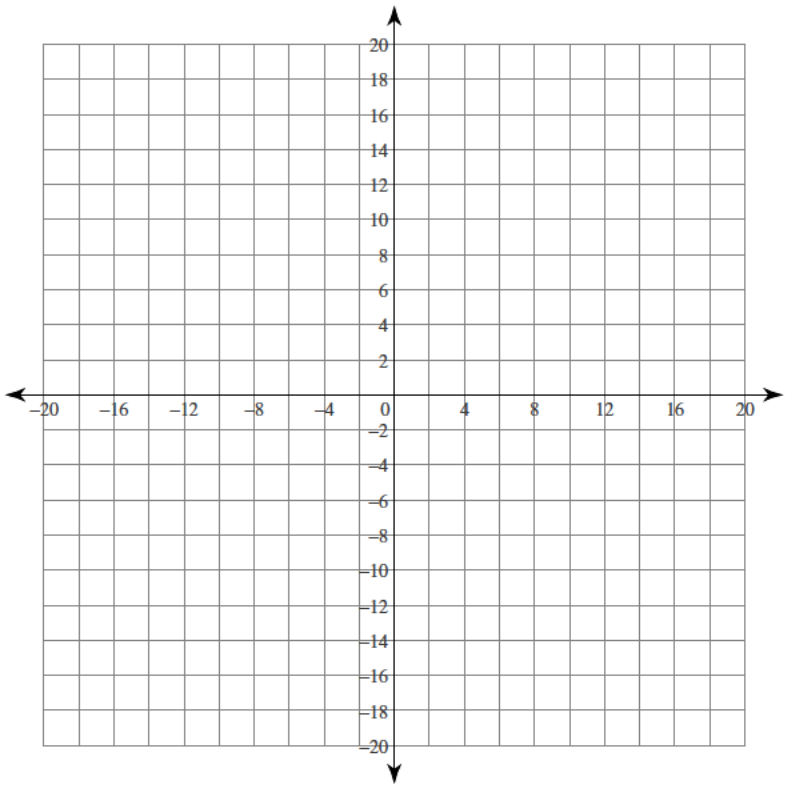
$x=7y+21$



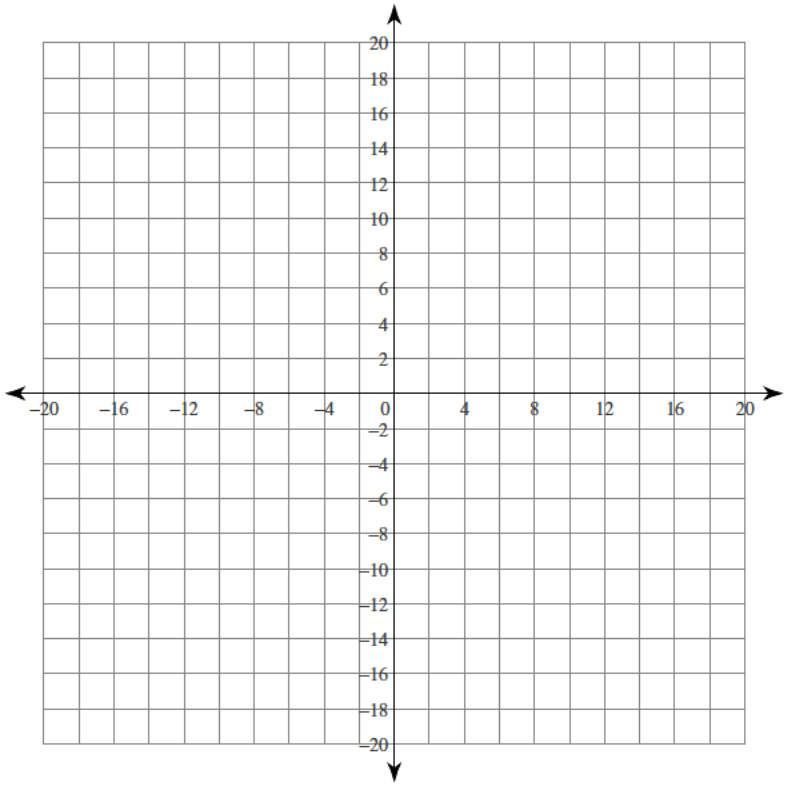
358) $y = -15 - x$
$-x - 11 = y$



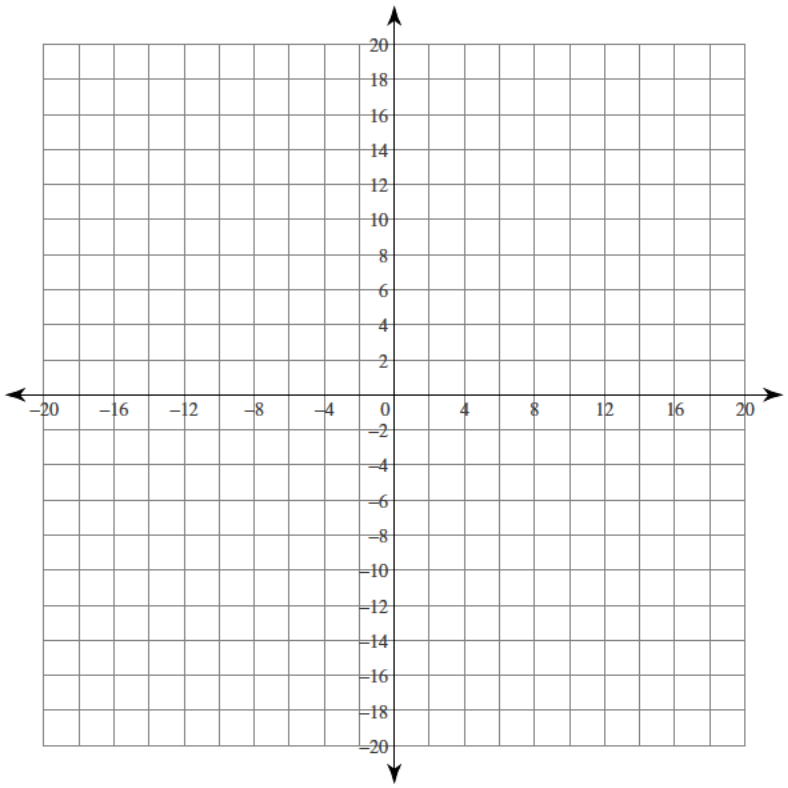
359) $9y + 2x = 153$
$28x + 81 = -9y$



360) $-17y + 13x + 153 = 0$
$27x = -51y - 663$

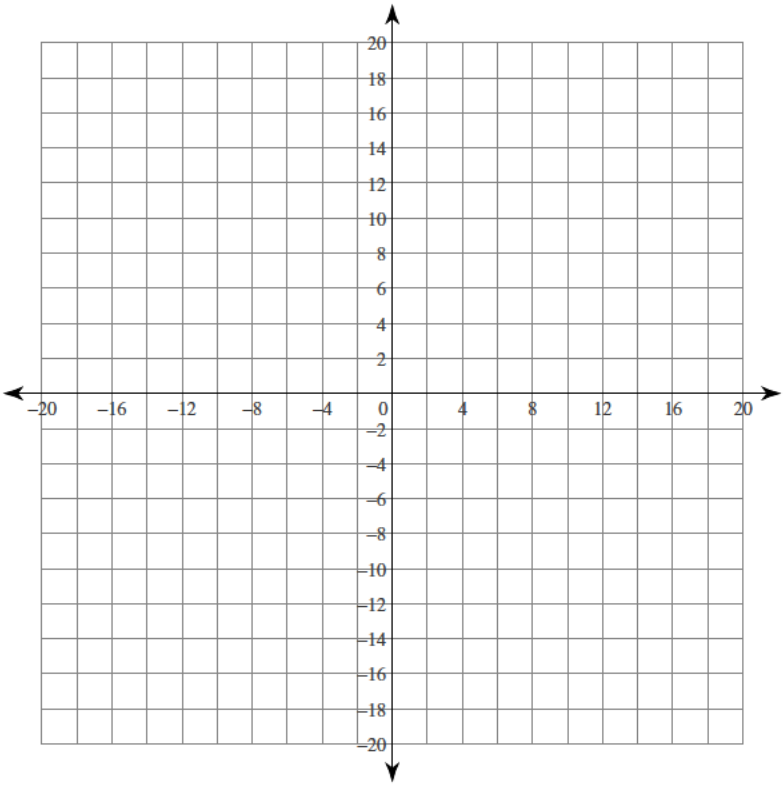


361) $270 - 2x = 15y$
$0 = -8x + 40 + 5y$



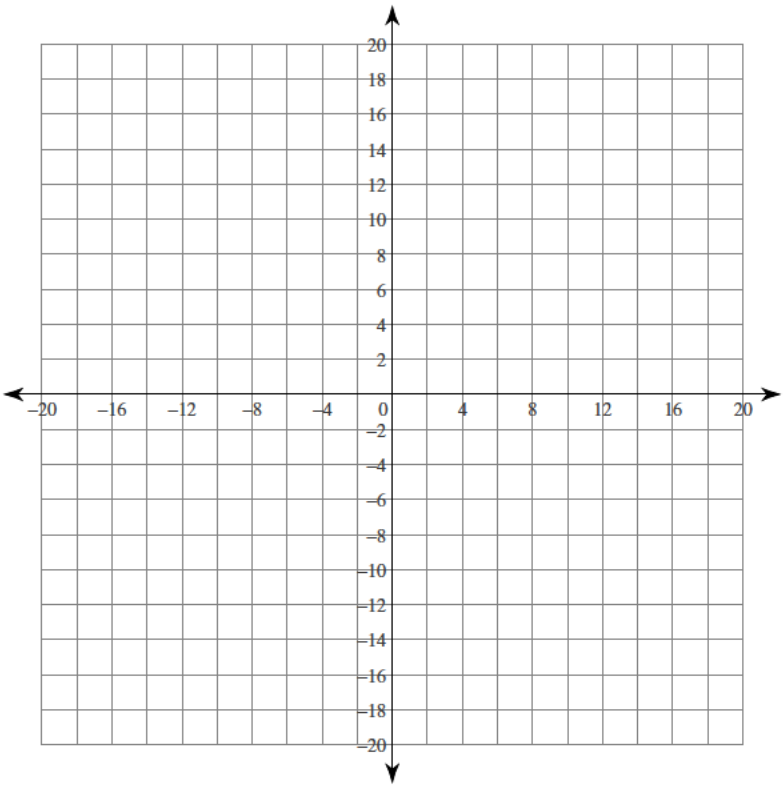
362) $0 = 7 + y$

$-y - 19 = 12x$

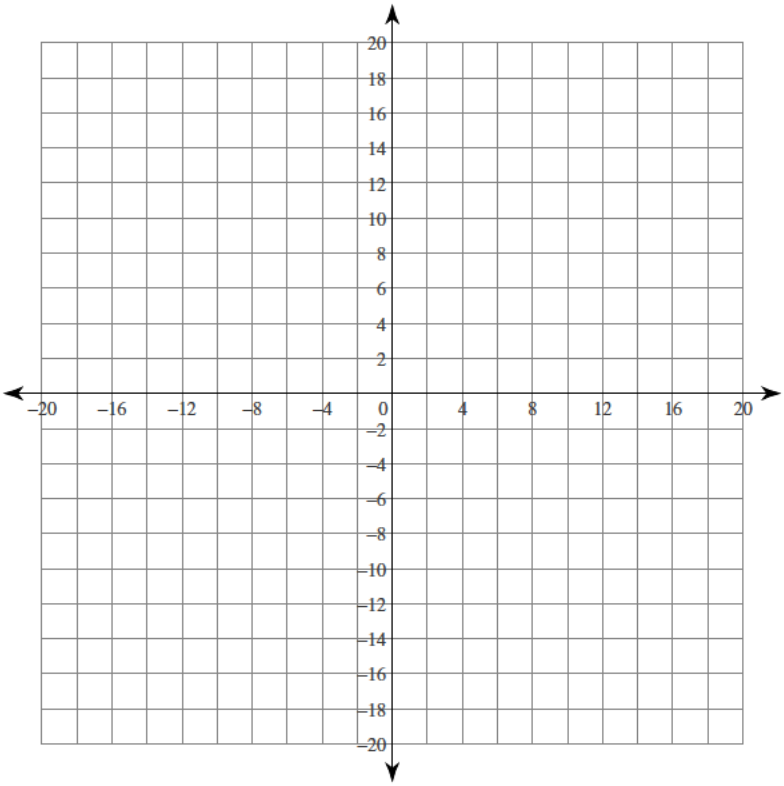


363) $14y = 42 - 13x$

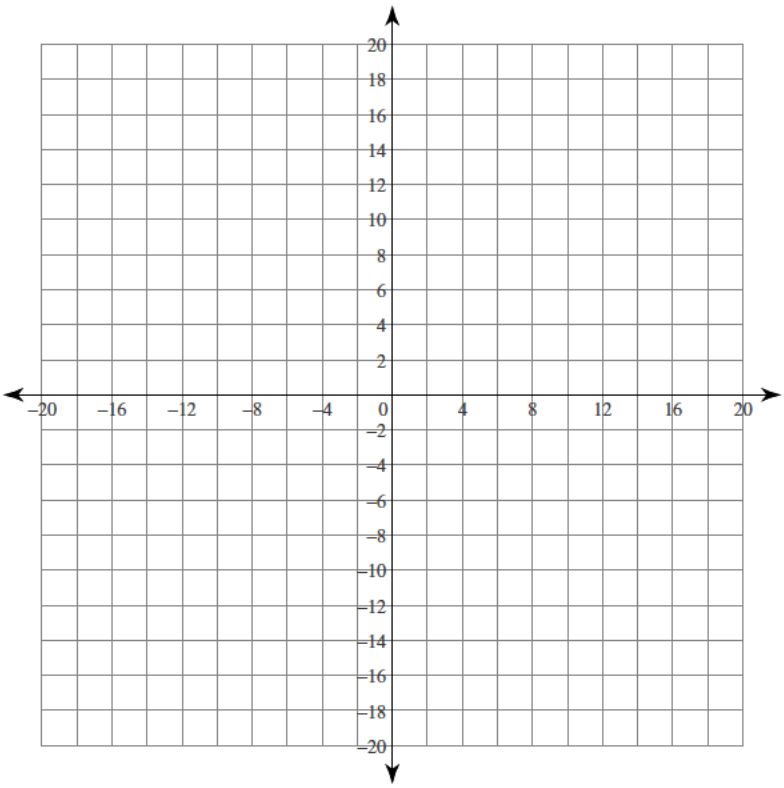
$-18 - y + \frac{4}{7}x = 0$



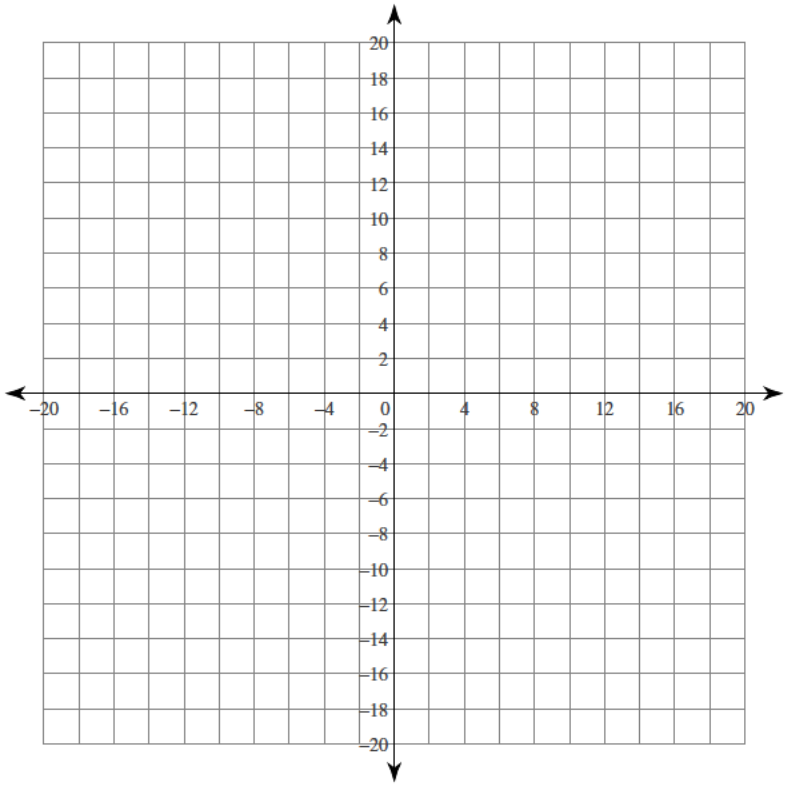
364) $7x = 17y - 102$
$170 + 17y = -9x$



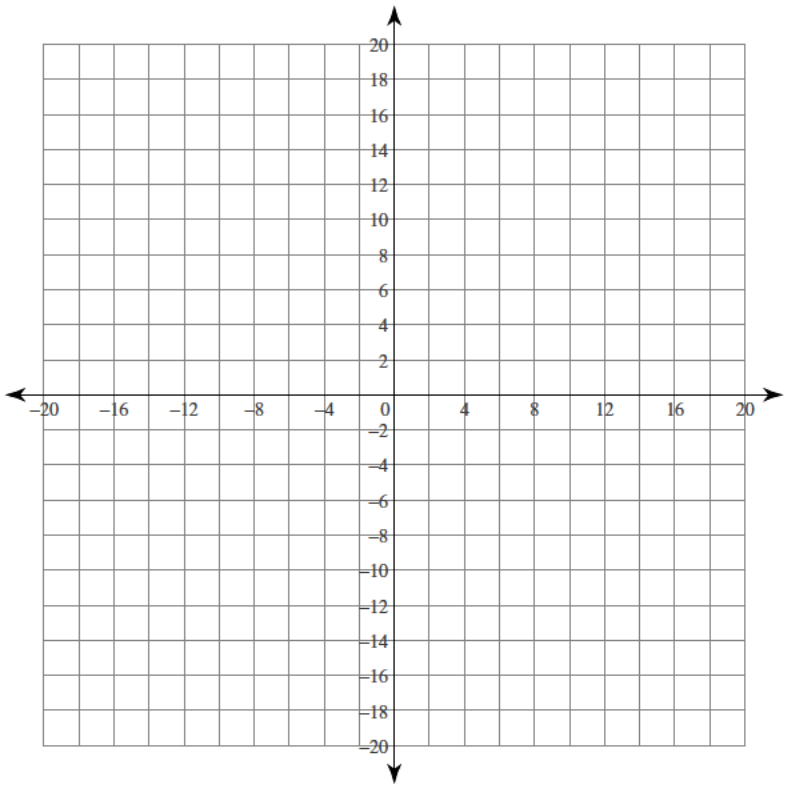
365) $0 = -11x + 102 - 6y$
$25x = 6y + 114$



366) $12x + 17y = -51$
$y - 9 = 0$

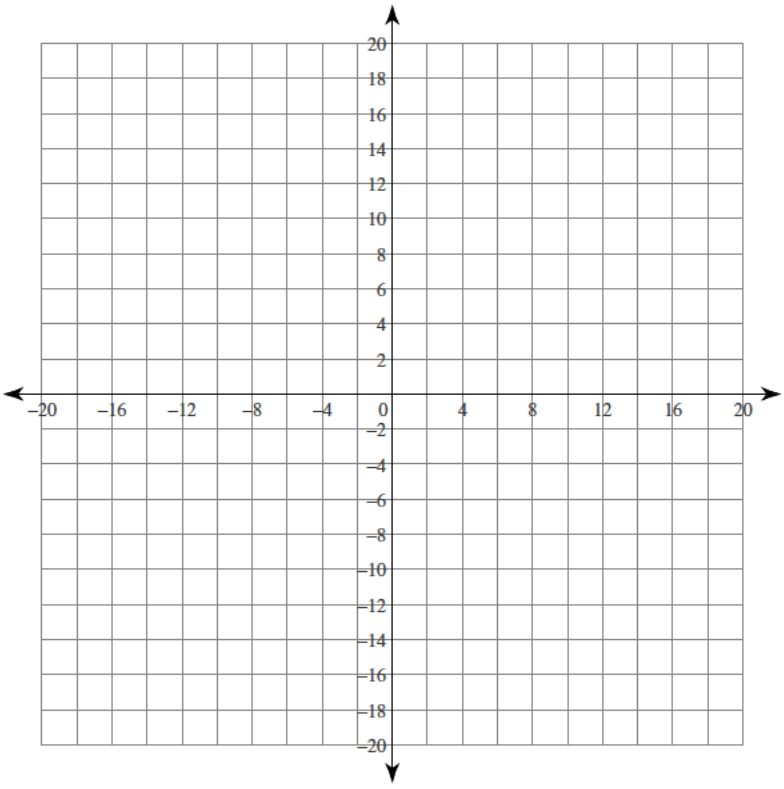


367) $-4x = 17 + 17y$
$-255 = -17y + 12x$



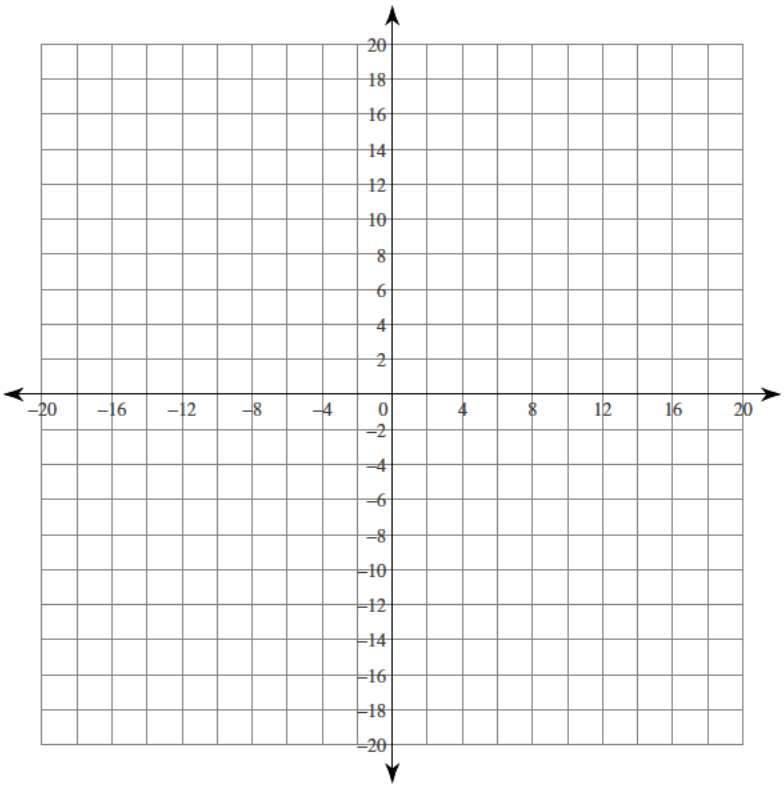
368) $15x = 324 - 18y$

$-\frac{96}{29} = -x + \frac{6}{29}y$

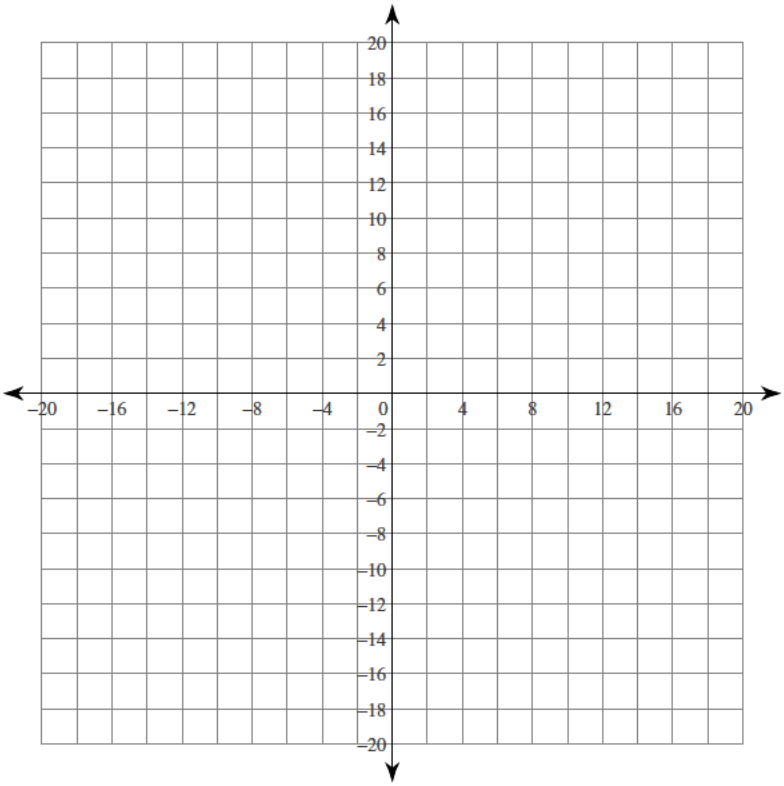


369) $-6y + 13x = -36$

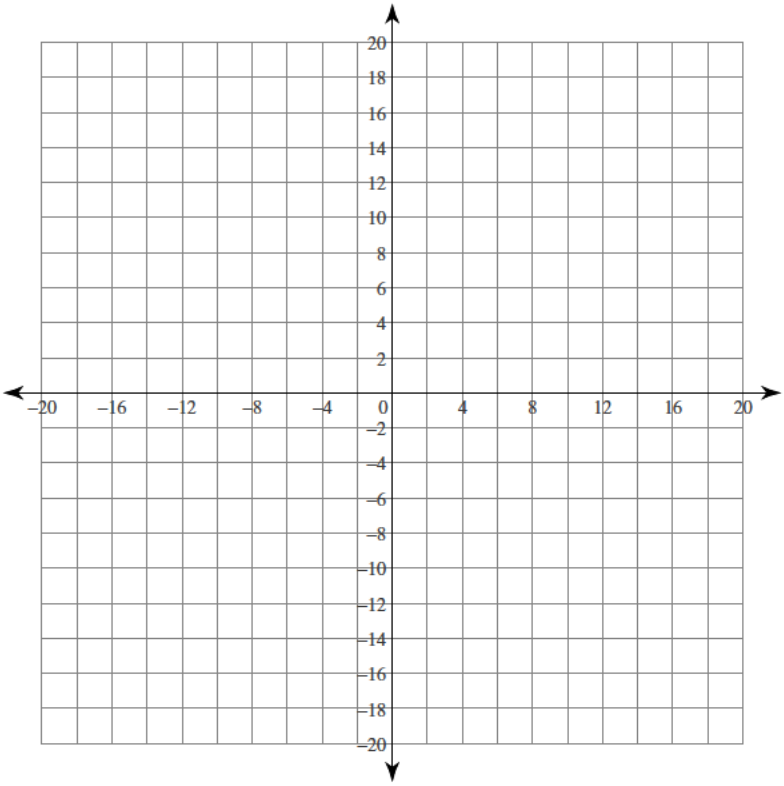
$60 = 6y - 13x$



370) $-55 + 3x - 5y = 0$
$10y = 100 + 27x$

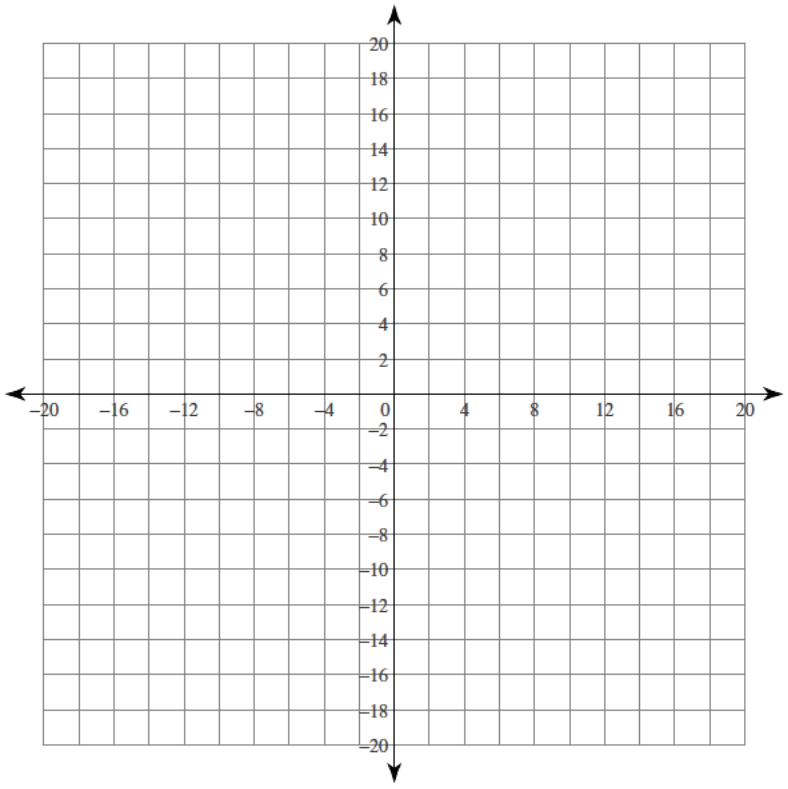


371) $-756 - 42y = -33x$
$6x + 14y = -14$



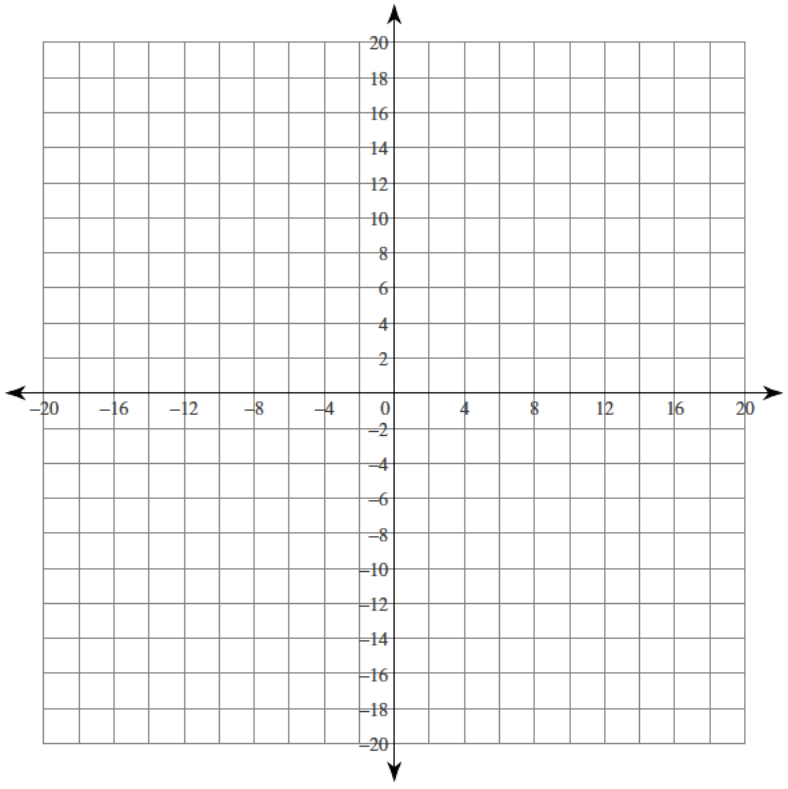
372) $x = 135 - 9y$

$\frac{3}{10}y + \frac{13}{15}x = -3$



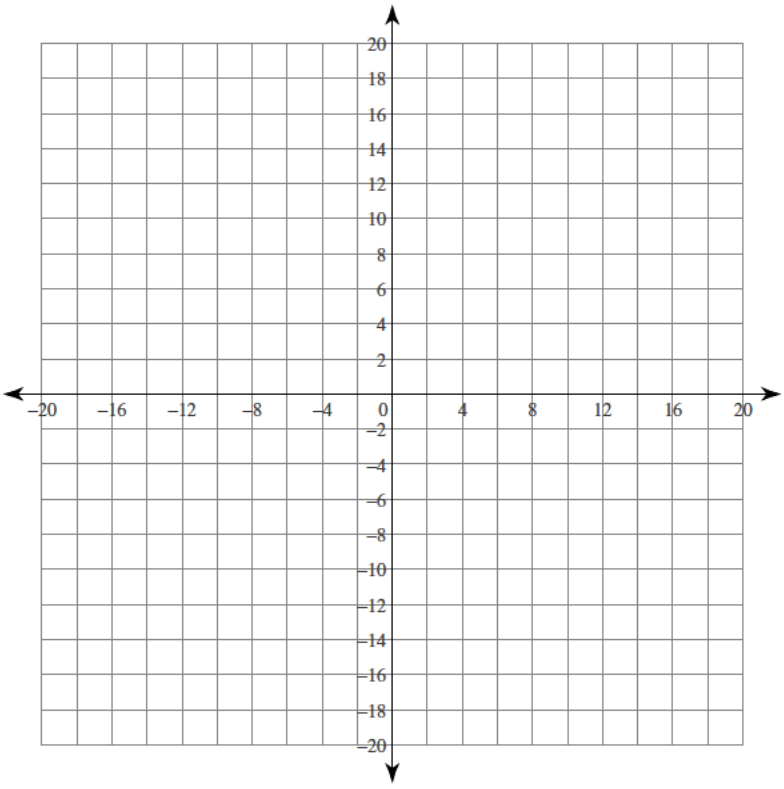
373) $-9x - 56 = 14y$

$-2x + \frac{238}{15} - \frac{14}{15}y = 0$



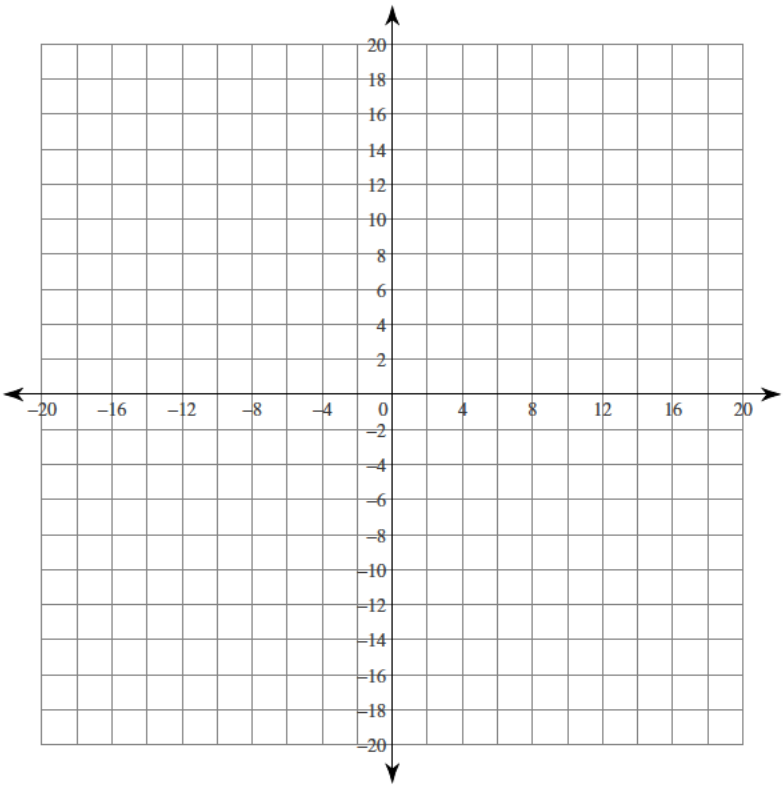
374) $-3-\frac{3}{16}y=\frac{9}{80}x$

$-80-10y=-2x$



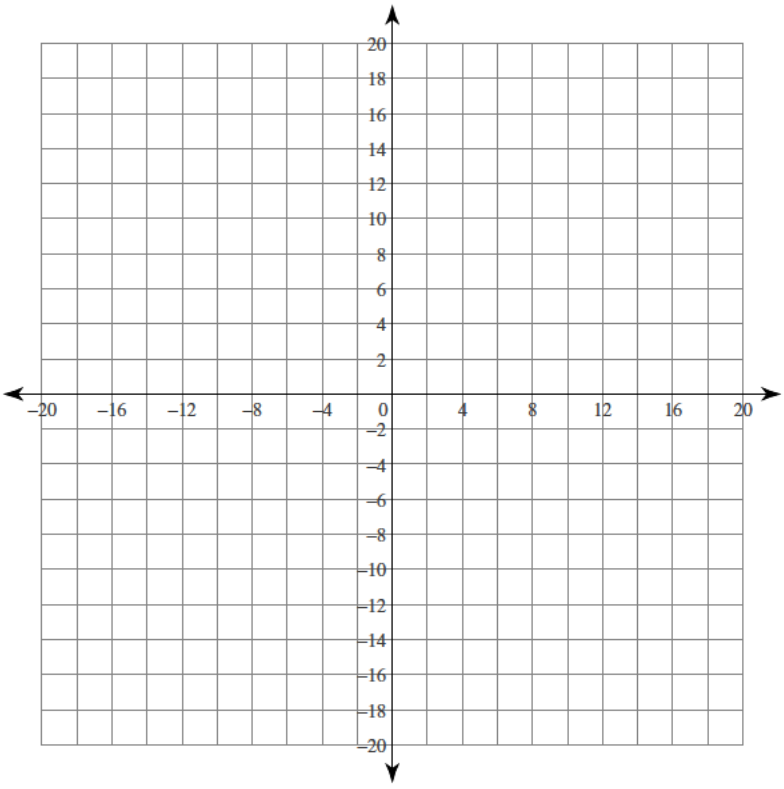
375) $1=x+y$

$11x+28=2y$



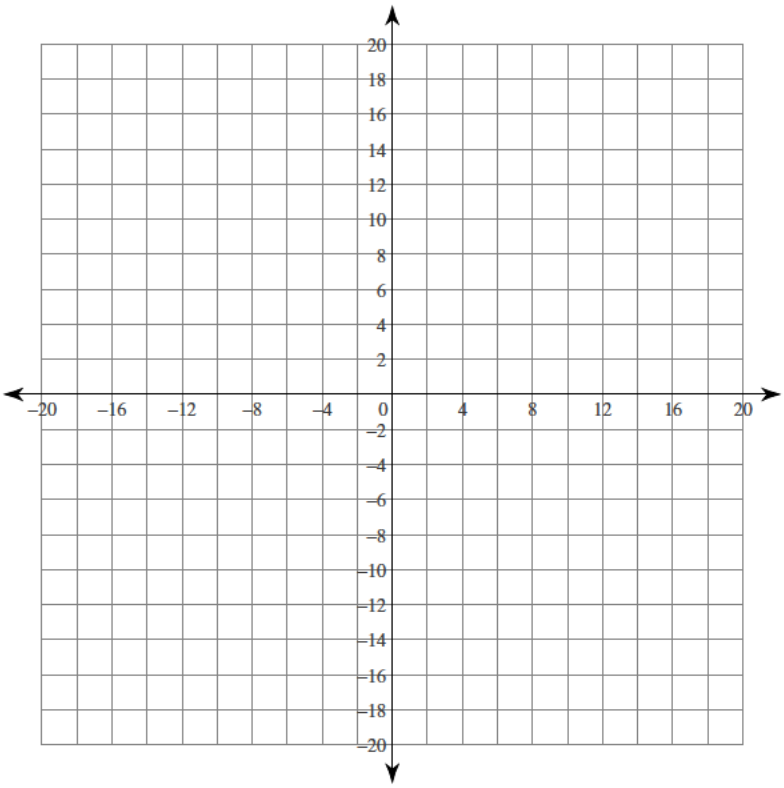
376) $-2y = -36 - 22x$

$\frac{1}{4}y = -1$

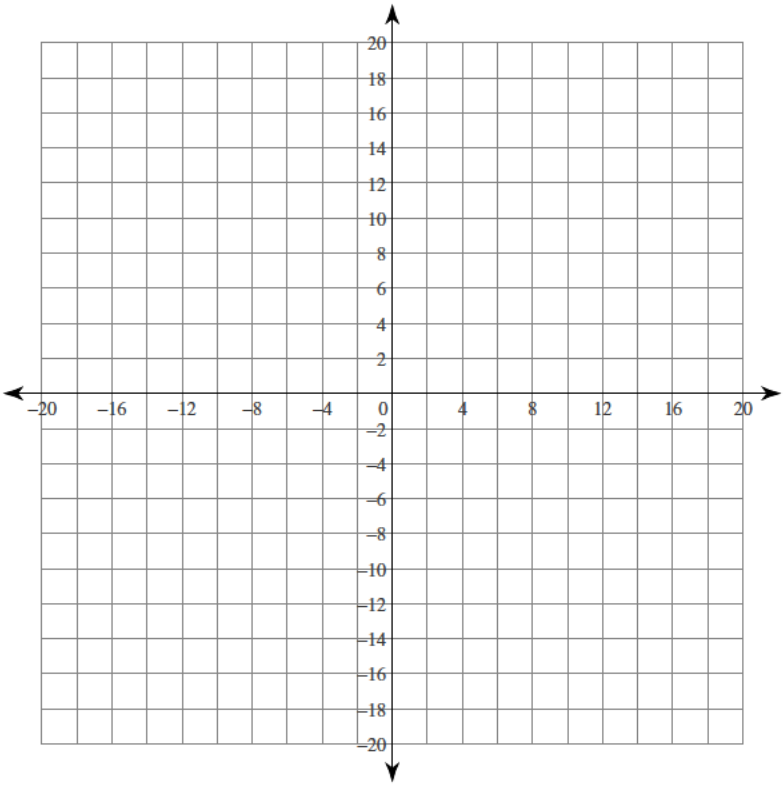


377) $-702 + 54y = 21x$

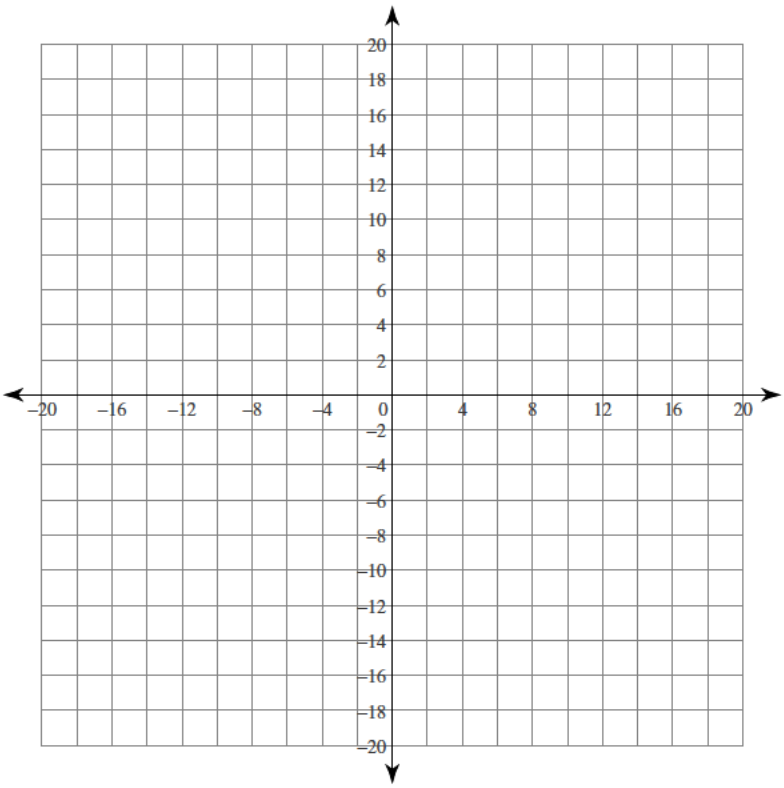
$12x = -162 - 9y$



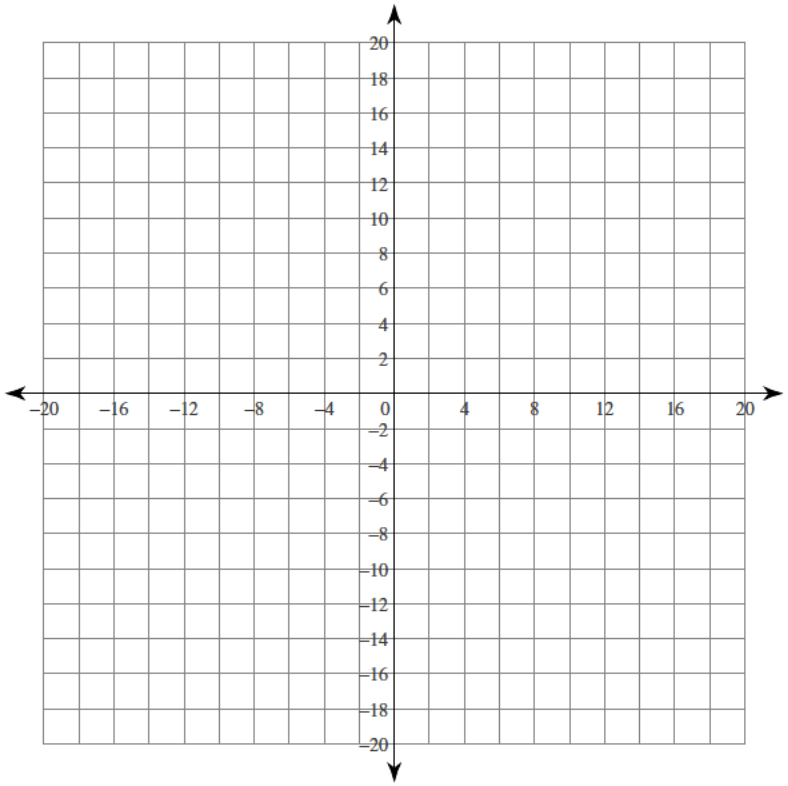
378) $26x - y = 13$
$13 - y = 0$



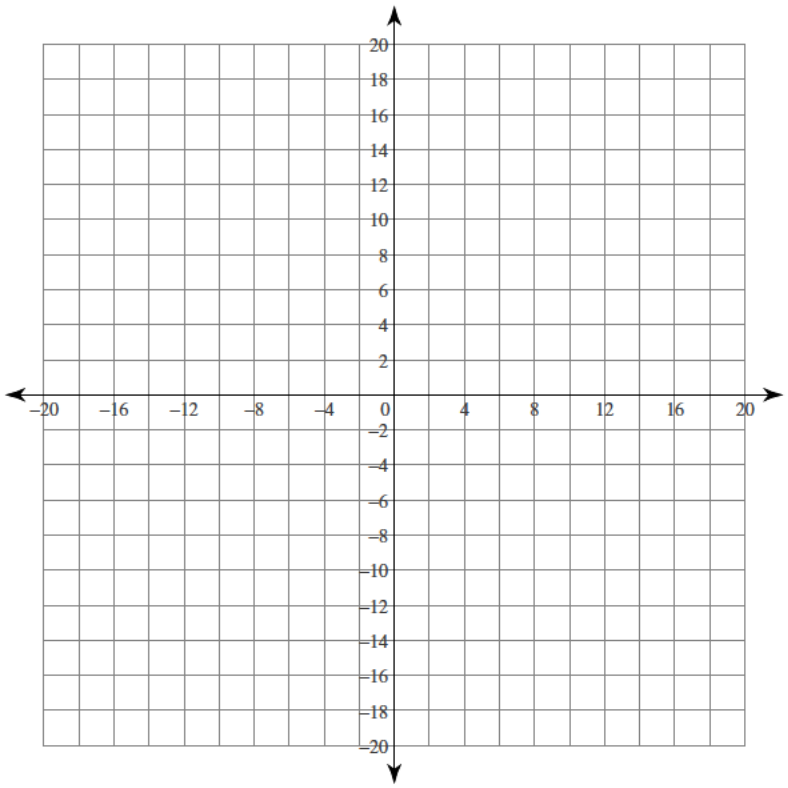
379) $17x + 14 + 2y = 0$
$-2y = x - 18$



380) $x + 9y = 99$
$0 = -9y - 8x - 27$

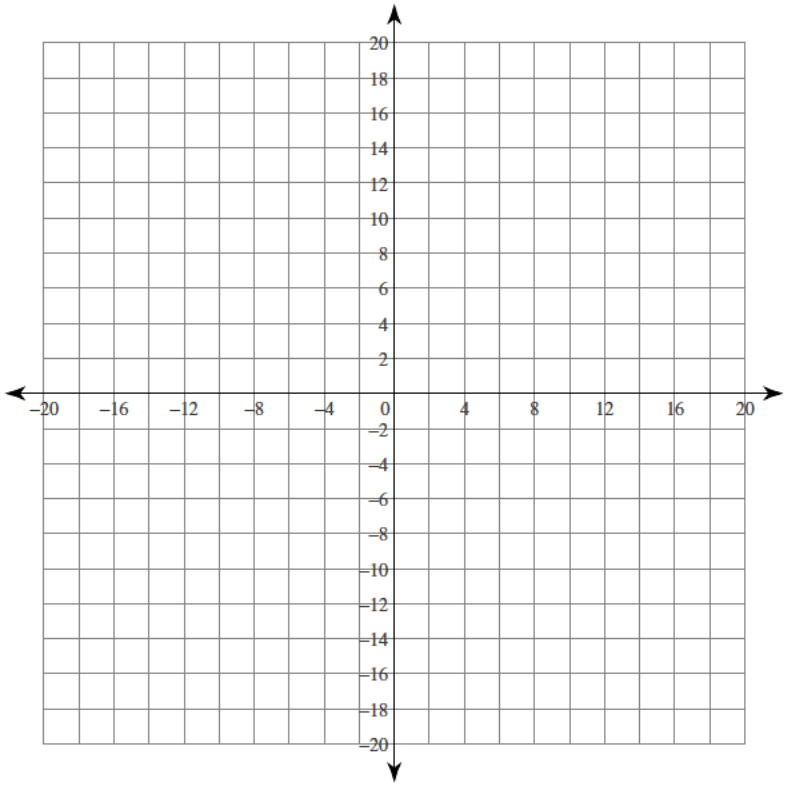


381) $5y - 33x = -85$
$-x + 5y = 75$



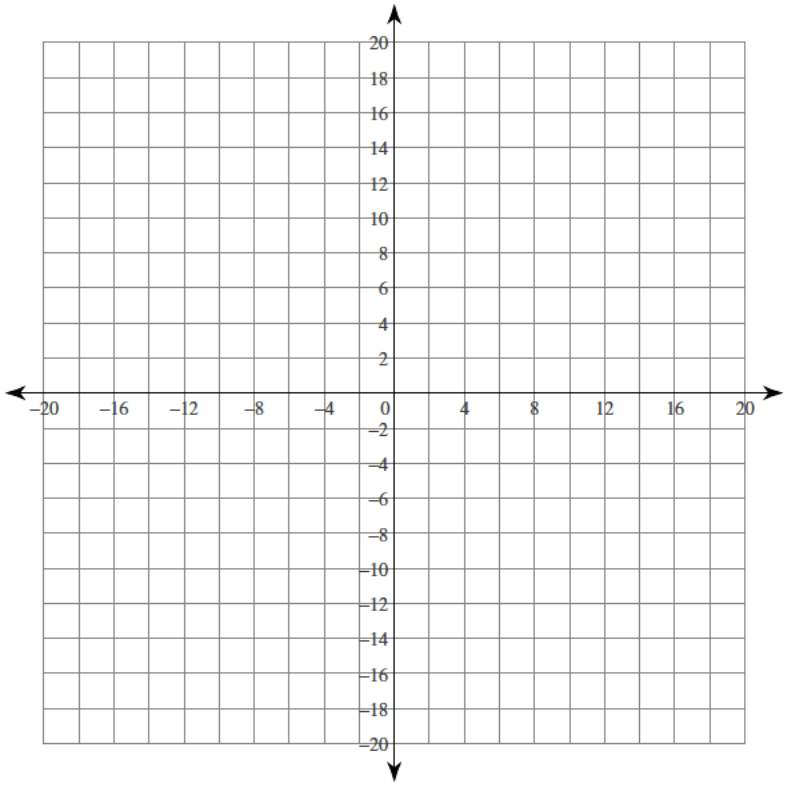
382) $-95 + 3x = 5y$

$45 = -5y - 7x$



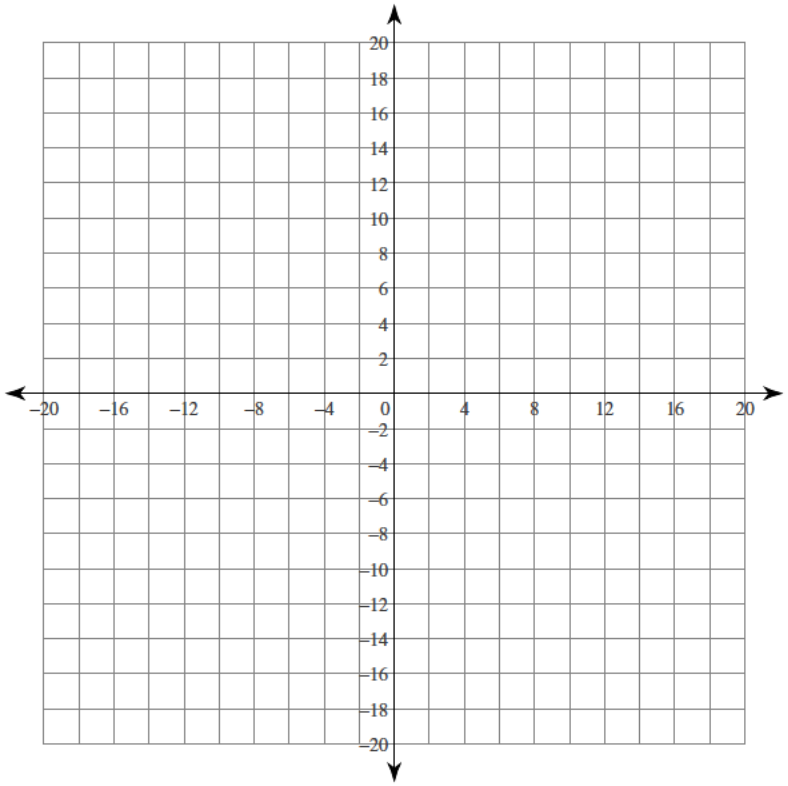
383) $y = -8 + \frac{1}{2}x$

$-y = -18 - \frac{31}{10}x$



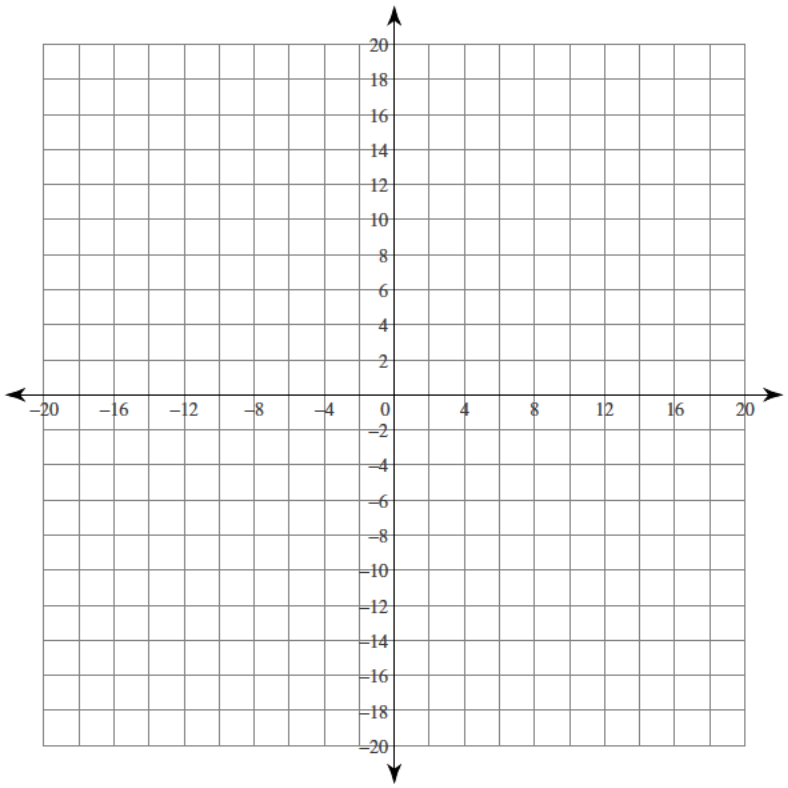
384) $0 = -3x - 54$

$-13x - 18y + 108 = 0$



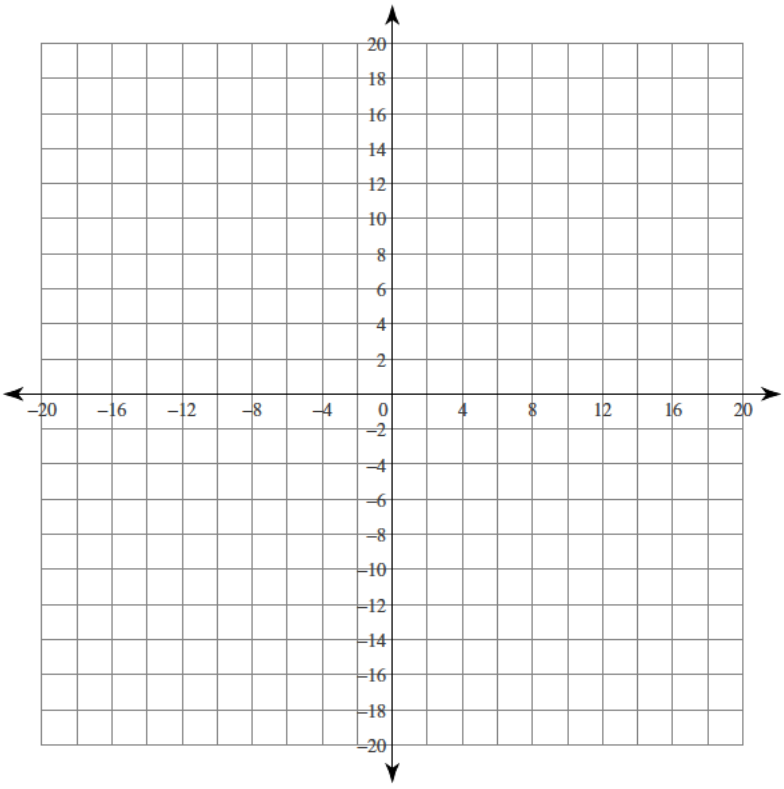
385) $-40 = -18x - 5y$

$-70 = 10y + 6x$



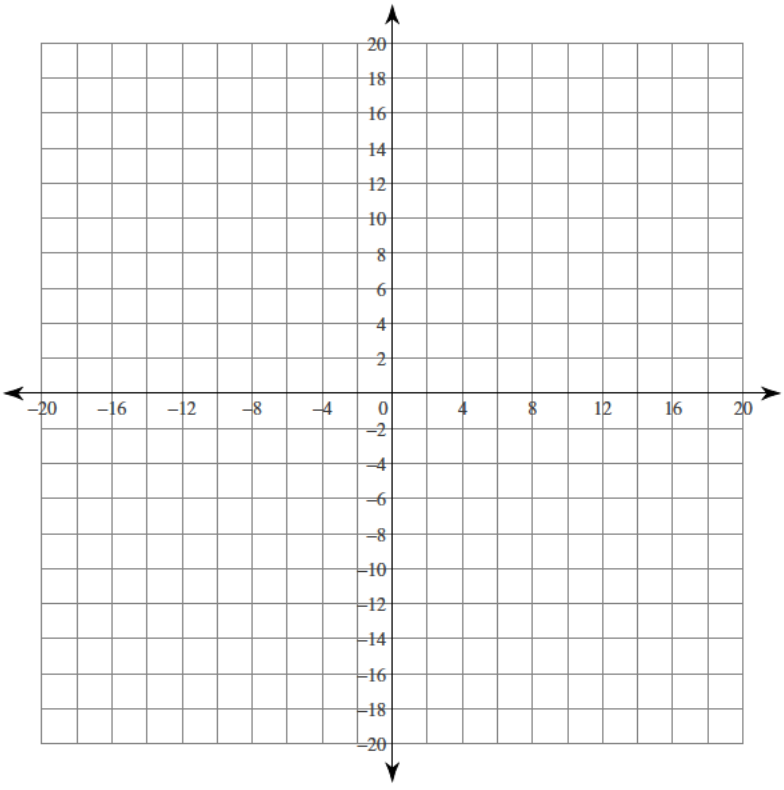
386) $\frac{11}{12}y = -x - \frac{209}{12}$

$0 = 429 - 33y + 60x$

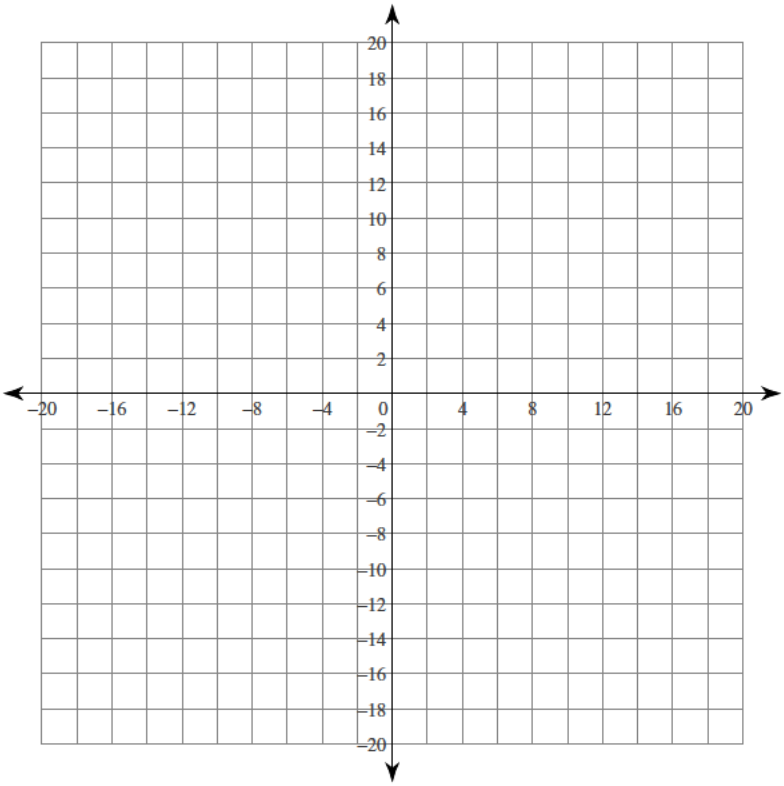


387) $0 = 80 - 19x - 10y$

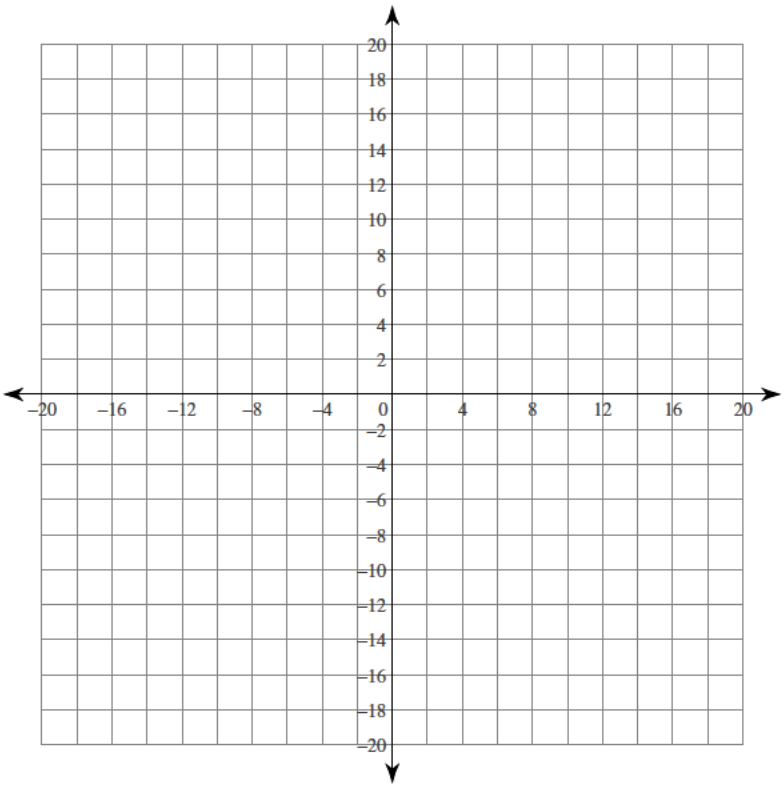
$-x = -120 - 10y$



388) $3x = -63 + 9y$
$3y = -42 - 20x$

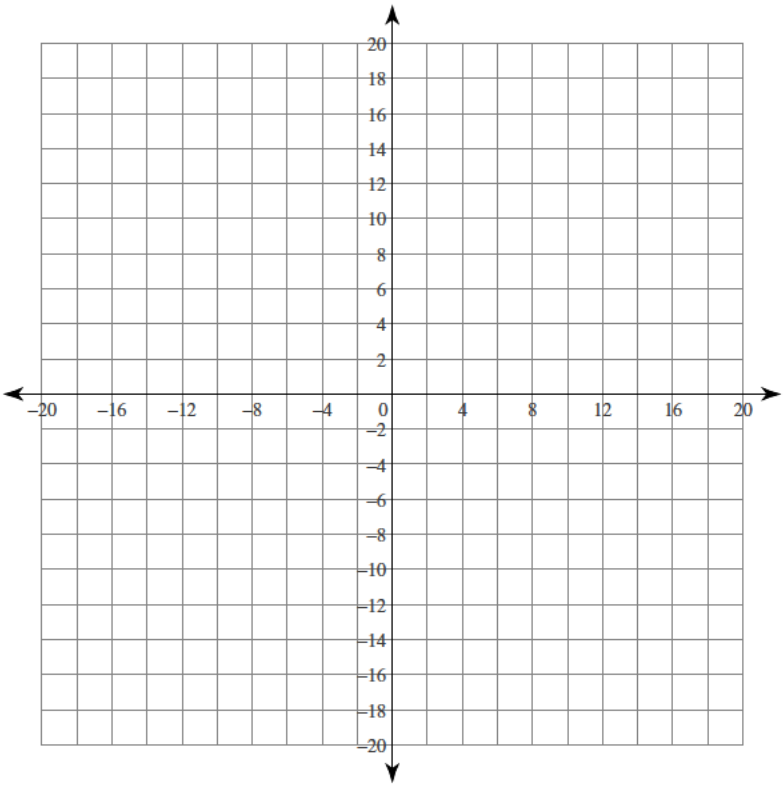


389) $2 - \frac{32}{247}x + \frac{2}{19}y = 0$
$-x + 13y = -52$



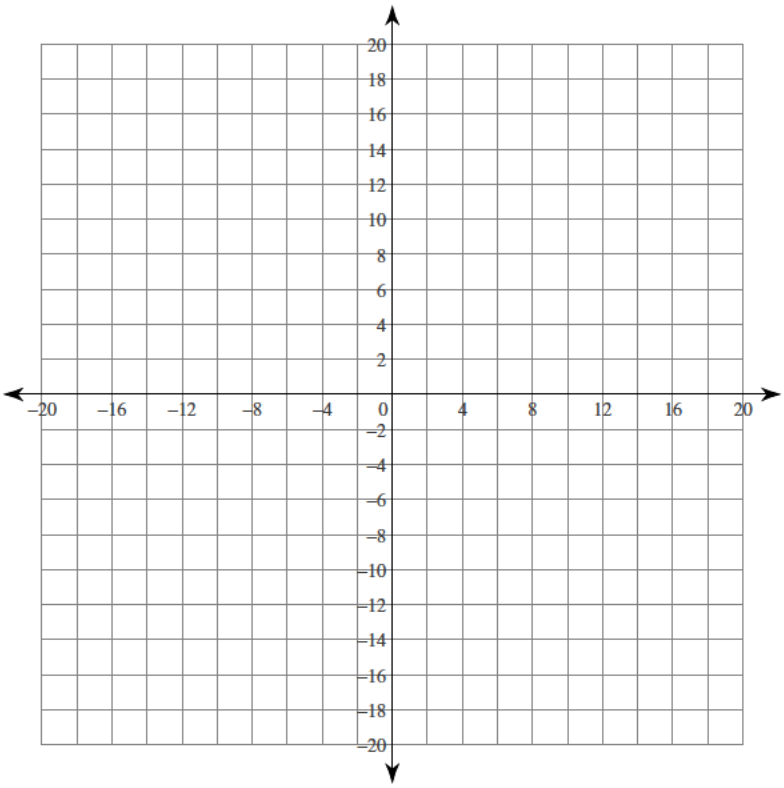
390) $\frac{3}{5}y - \frac{24}{65}x = -3$

$0 = -78 + 3x + 13y$

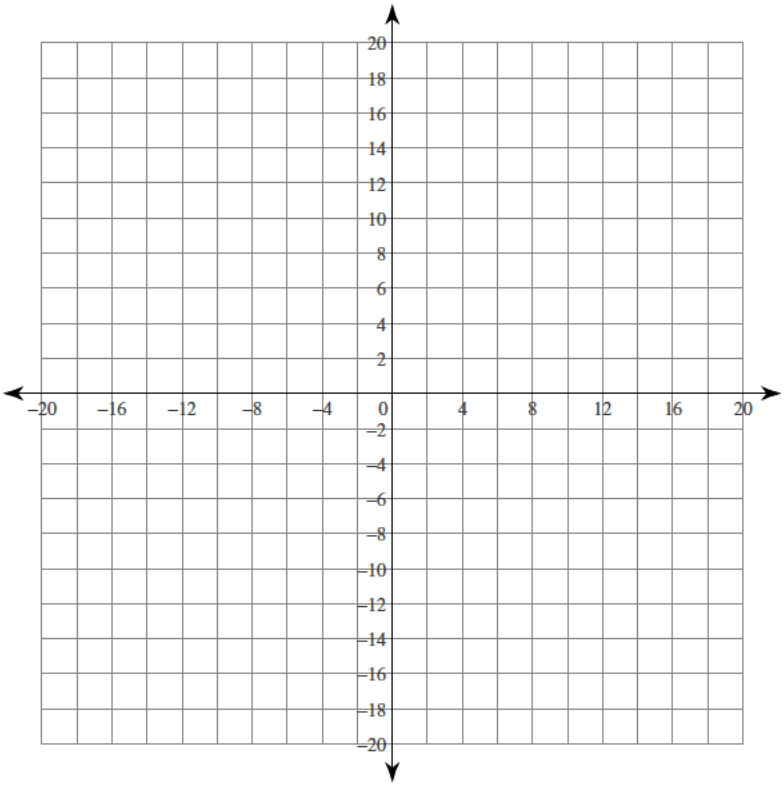


391) $-5x - 12y = -180$

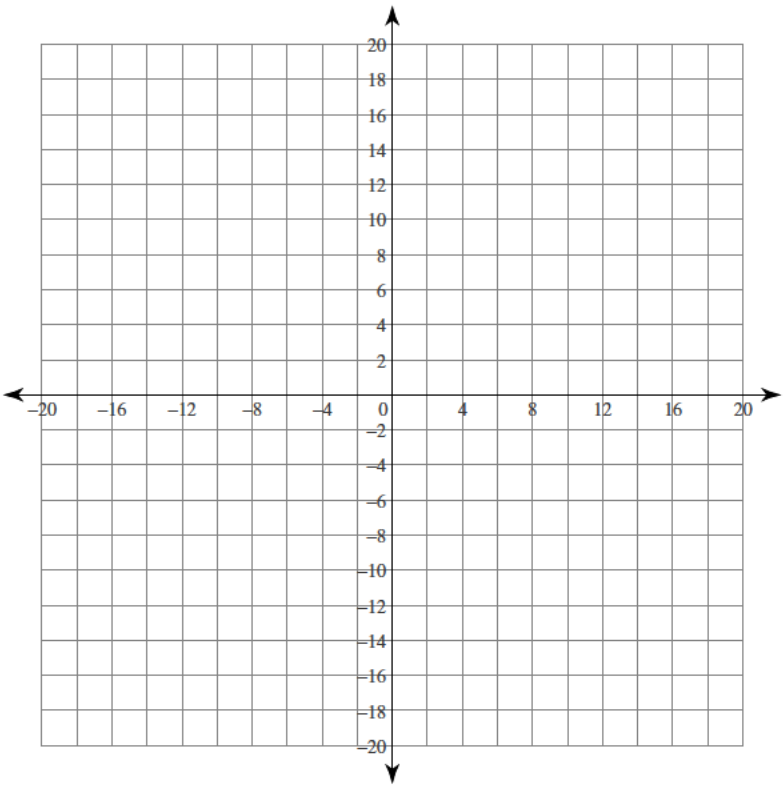
$0 = 108 - 19x + 12y$



392) $19y = -7x + 171$
$-19y = 152 + 24x$

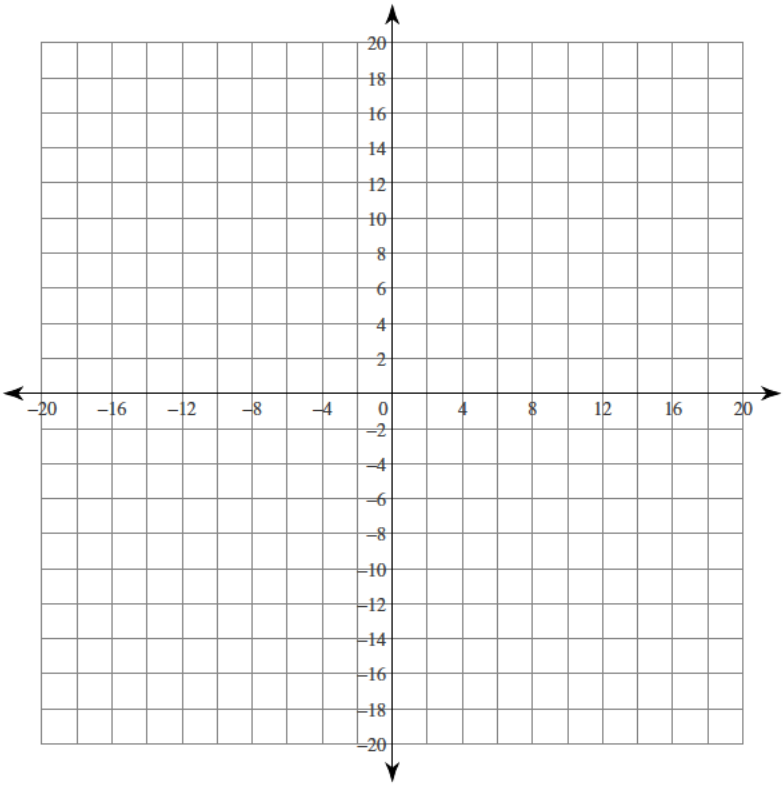


393) $19y = 304 + 32x$
$152 - 8x + 19y = 0$



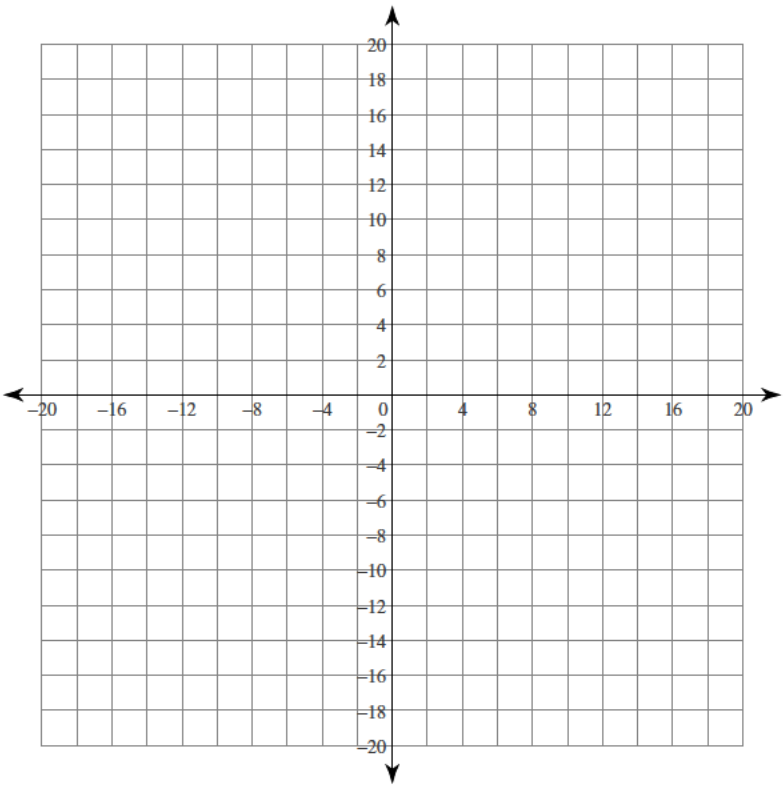
394) $3y - 6 = -17x$

$y = 19$



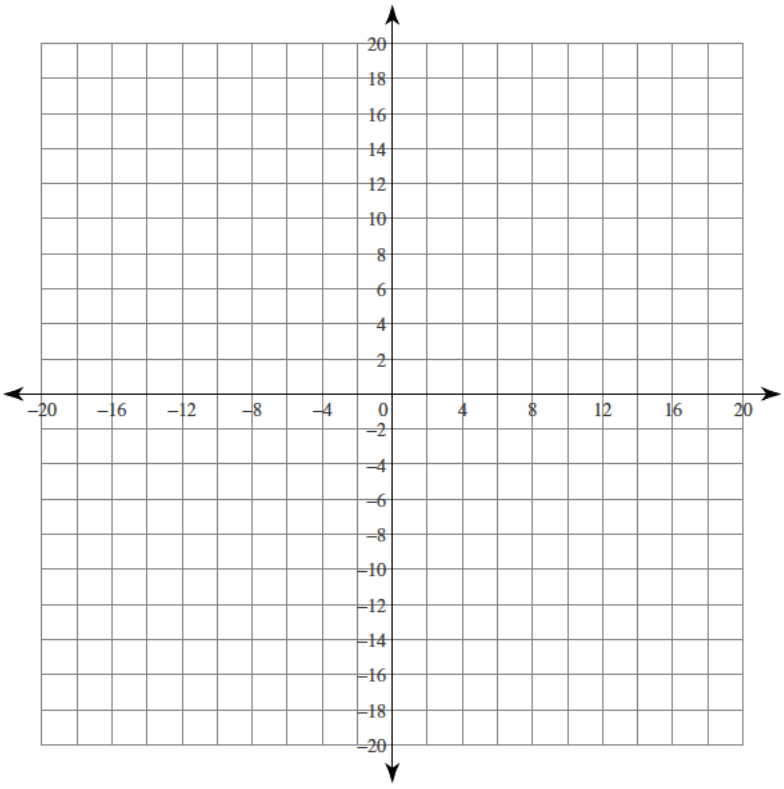
395) $95 + 5y = 6x$

$-x = -5$



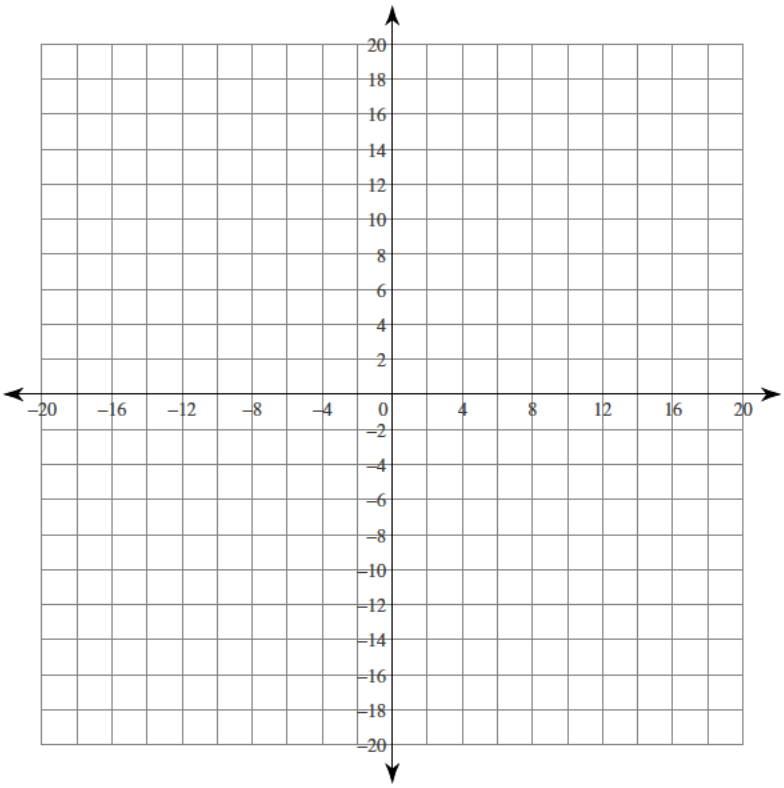
396) $-\frac{1}{7}y = 2 + \frac{9}{7}x$

$90 = 6y - 4x$



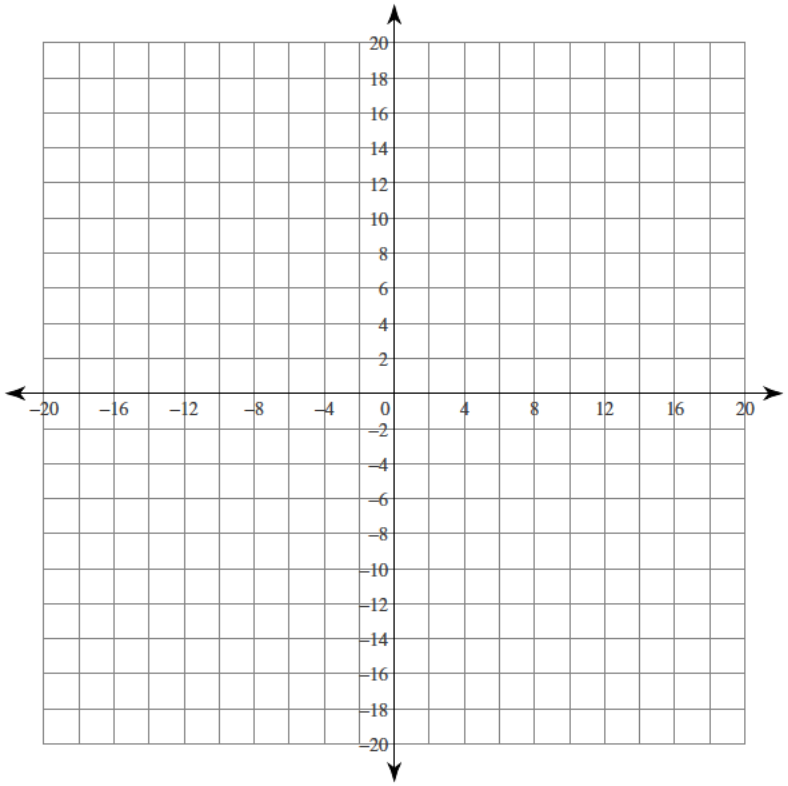
397) $2x - y = -19$

$2x + 11y + 55 = 0$



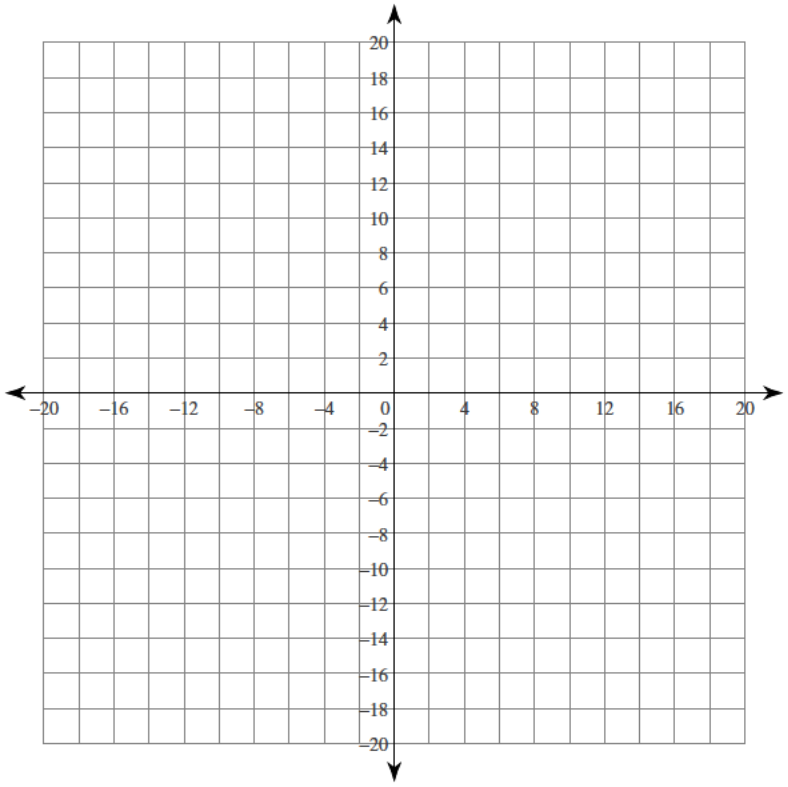
398) $14 - 5x = y$

$-36 + 3x = 4y$

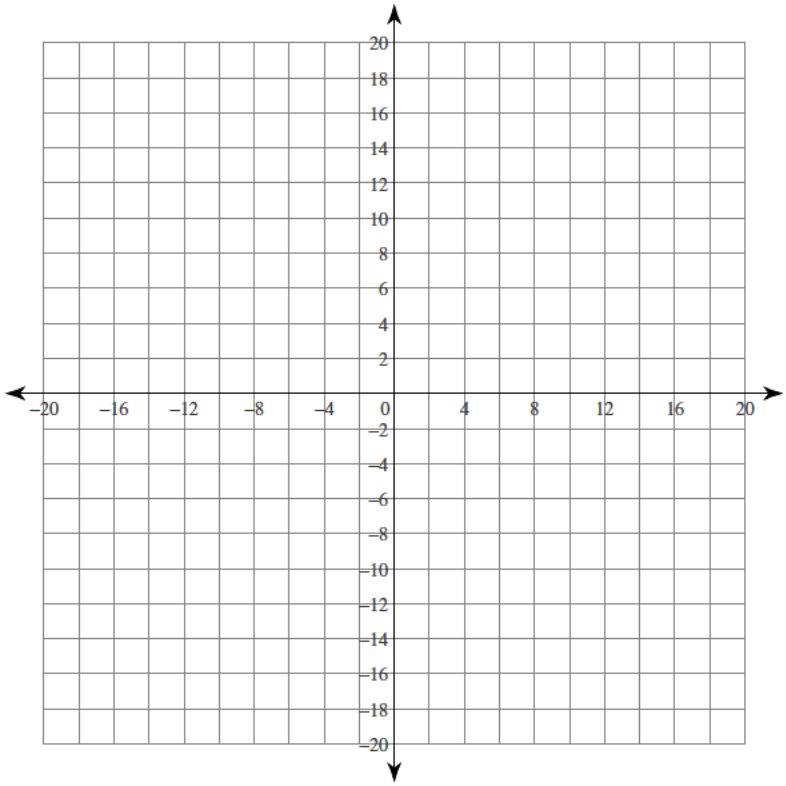


399) $-\frac{3}{152}x = 1 + \frac{1}{16}y$

$2 - \frac{1}{6}y + \frac{11}{57}x = 0$



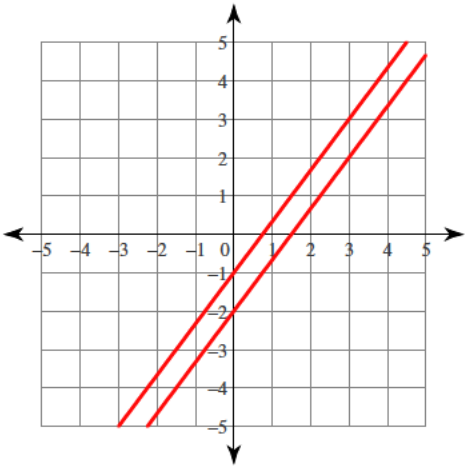
400) $19y = -209 + 15x$
$20x - 532 + 38y = 0$



Graphing linear equations

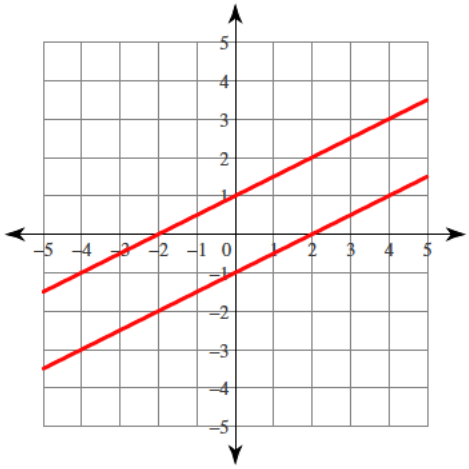
Sketch the graph of each line.

1) $4x - 3y = 3$
$4x - 3y = 6$



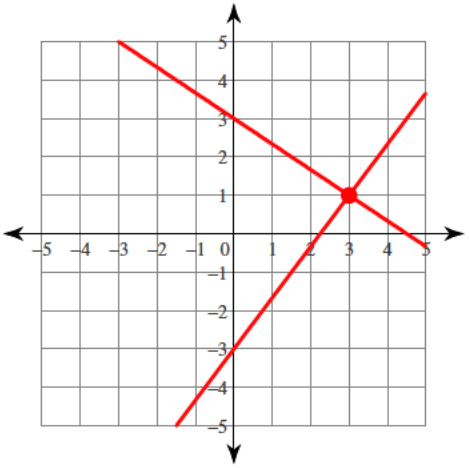
No solution

2) $x - 2y = 2$
$x - 2y = -2$



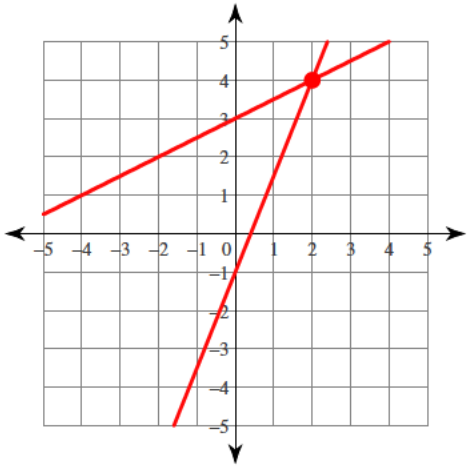
No solution

3) $4x - 3y = 9$
$2x + 3y = 9$



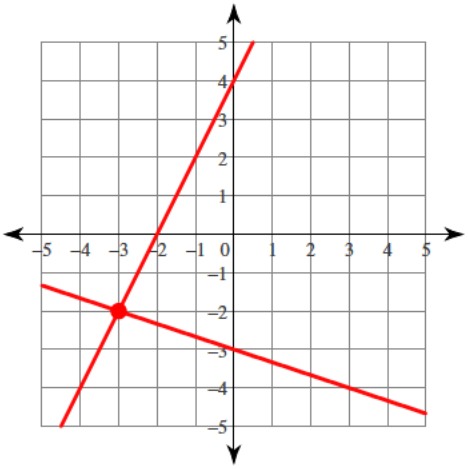
(3, 1)

4) $5x - 2y = 2$
$x - 2y = -6$



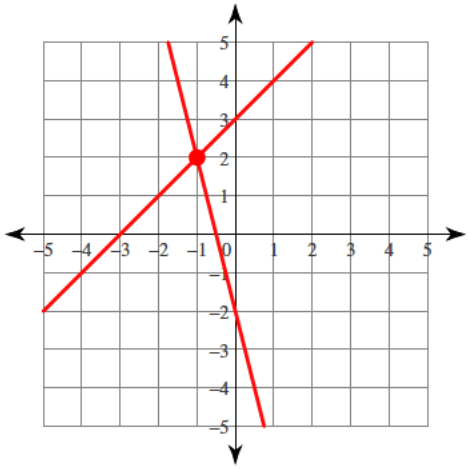
(2, 4)

5) $x + 3y = -9$
$2x - y = -4$



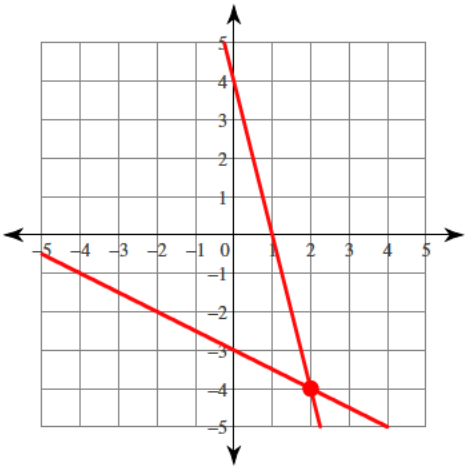
(–3, –2)

6) $x - y = -3$
$4x + y = -2$



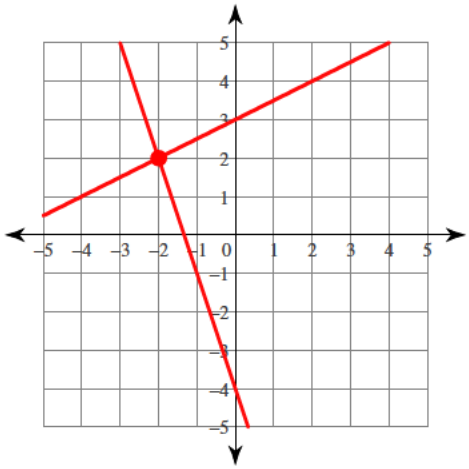
(–1, 2)

7) $4x + y = 4$
$x + 2y = -6$



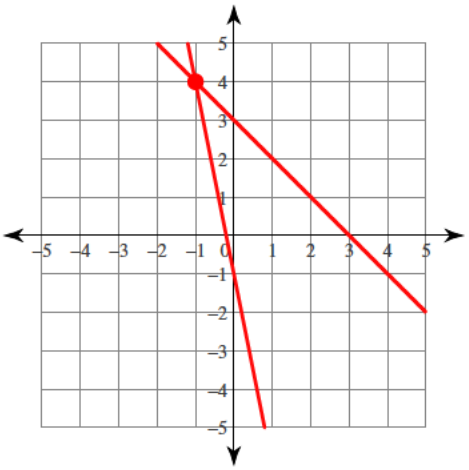
(2, –4)

8) $3x + y = -4$
$x - 2y = -6$



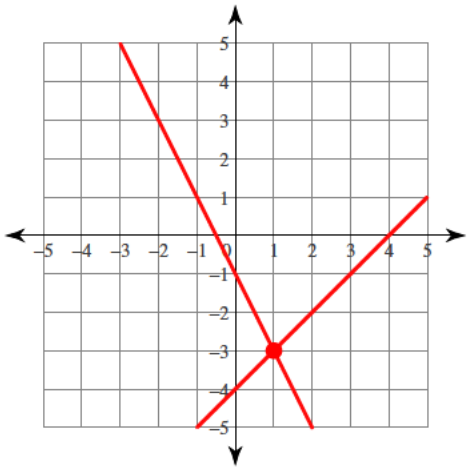
(–2, 2)

9) $5x + y = -1$
$x + y = 3$



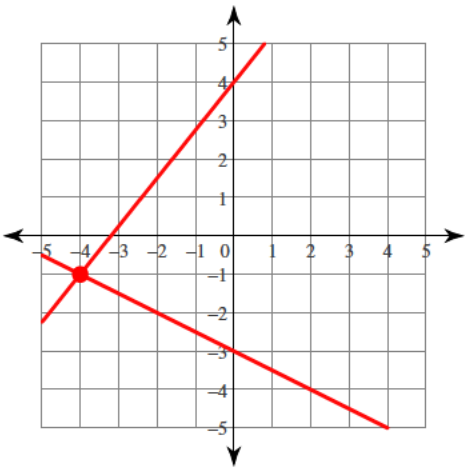
(–1, 4)

10) $x - y = 4$
$2x + y = -1$



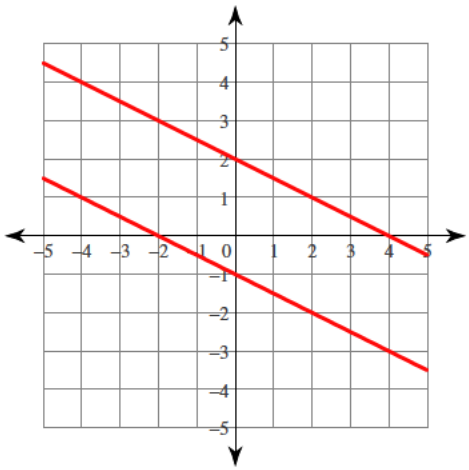
(1, –3)

11) $x + 2y = -6$
$5x - 4y = -16$



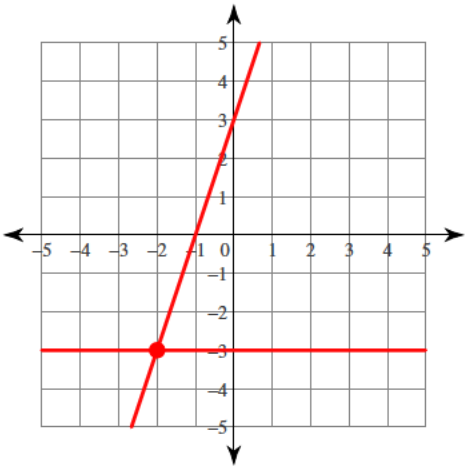
(–4, –1)

12) $x + 2y = 4$
$x + 2y = -2$



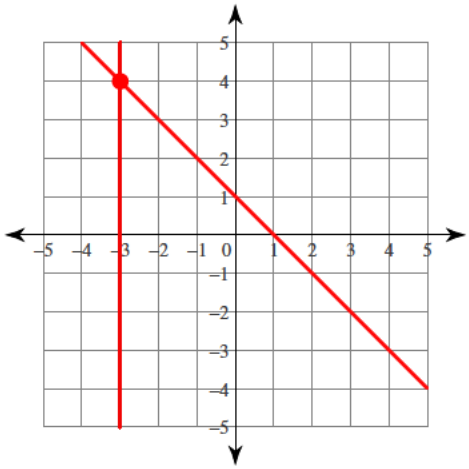
No solution

13) $y = -3$
$3x - y = -3$



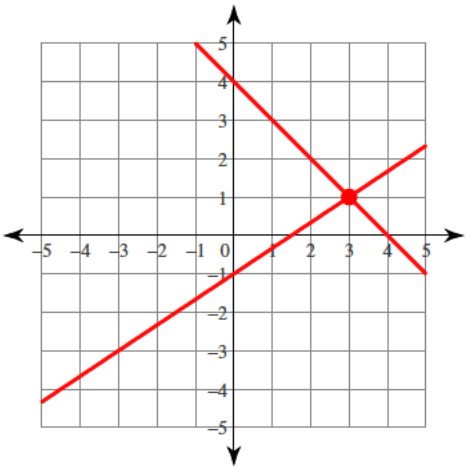
(–2, –3)

14) $x = -3$
$x + y = 1$



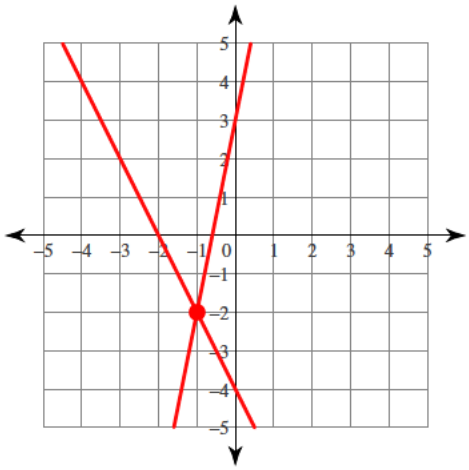
(–3, 4)

15) $2x - 3y = 3$
$x + y = 4$



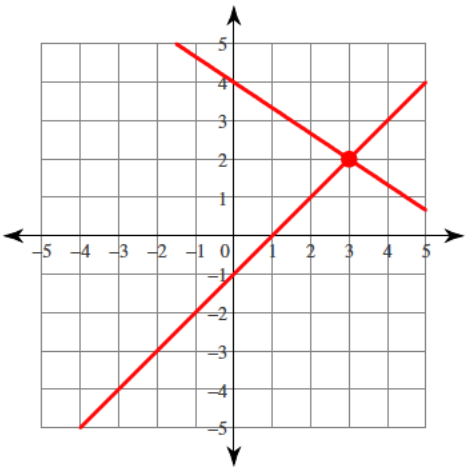
(3, 1)

16) $5x - y = -3$
$2x + y = -4$



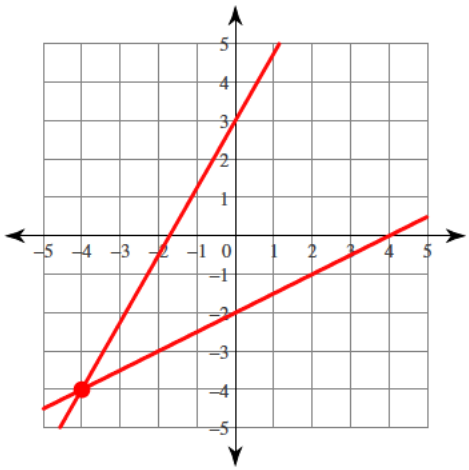
(–1, –2)

17) $2x + 3y = 12$
$x - y = 1$



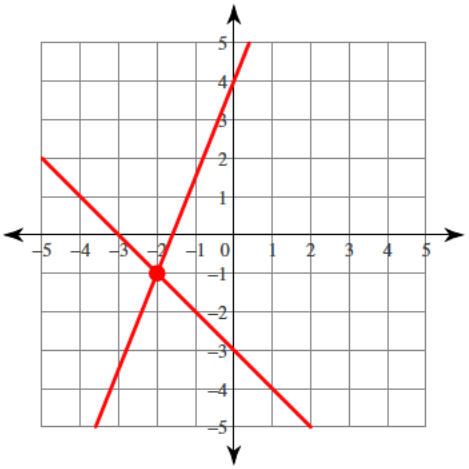
(3, 2)

18) $7x - 4y = -12$
$x - 2y = 4$



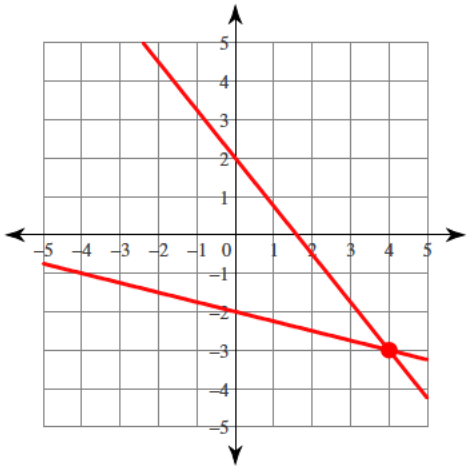
(–4, –4)

19) $x + y = -3$
$5x - 2y = -8$



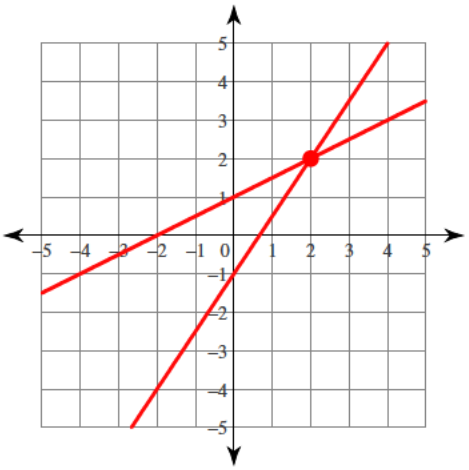
(–2, –1)

20) $x + 4y = -8$
$5x + 4y = 8$



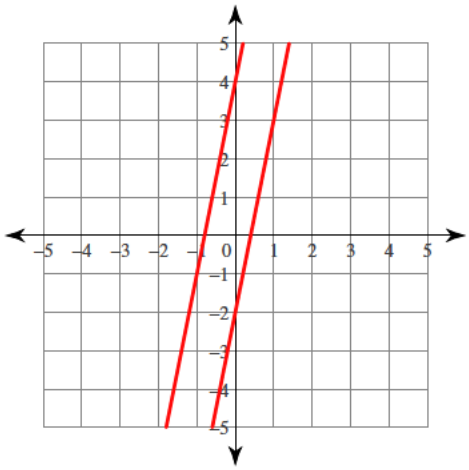
(4, –3)

21) $x - 2y = -2$
$3x - 2y = 2$



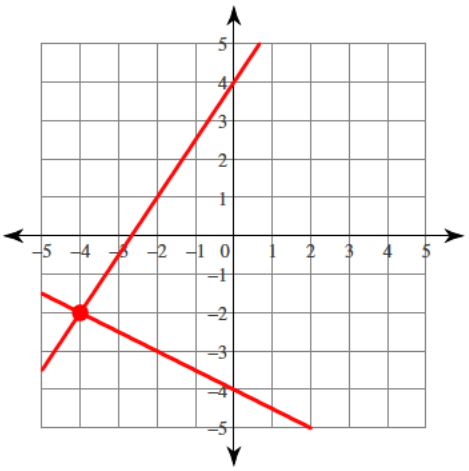
(2, 2)

22) $5x - y = 2$
$5x - y = -4$



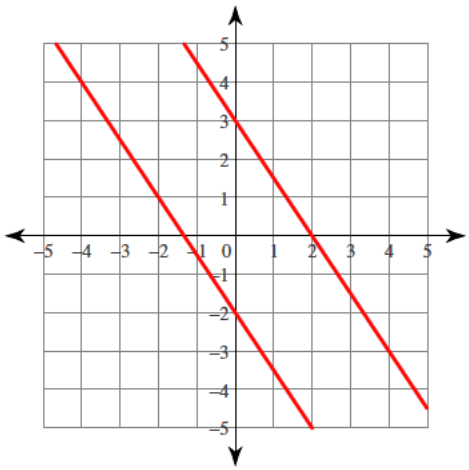
No solution

23) $3x - 2y = -8$
$x + 2y = -8$



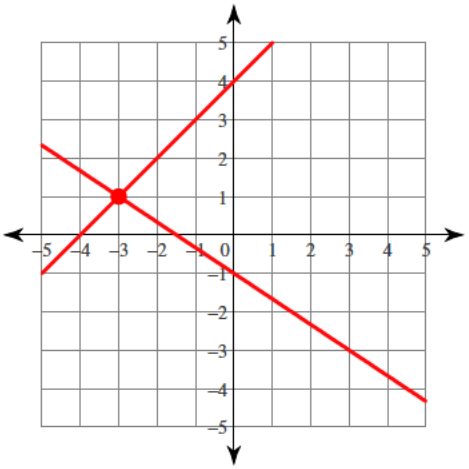
(–4, –2)

24) $3x + 2y = 6$
$3x + 2y = -4$



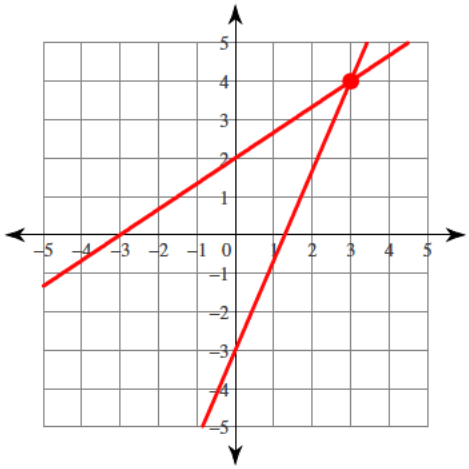
No solution

25) $x - y = -4$
$2x + 3y = -3$



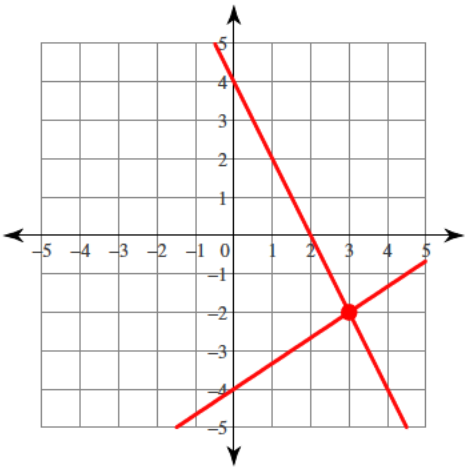
(–3, 1)

26) $7x - 3y = 9$
$2x - 3y = -6$



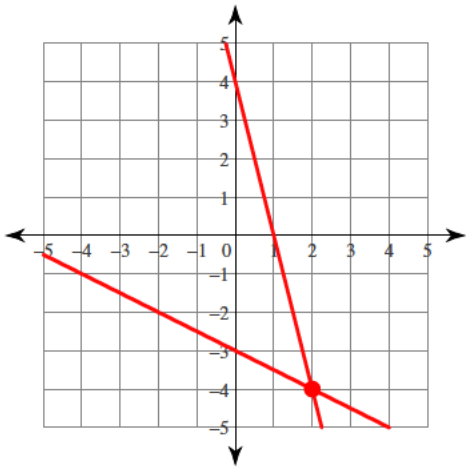
(3, 4)

27) $2x - 3y = 12$
$2x + y = 4$



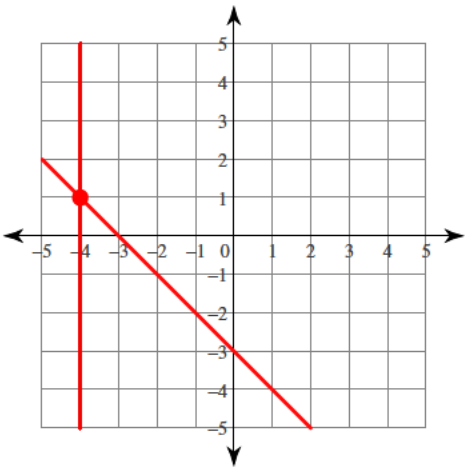
(3, –2)

28) $x + 2y = -6$
$4x + y = 4$



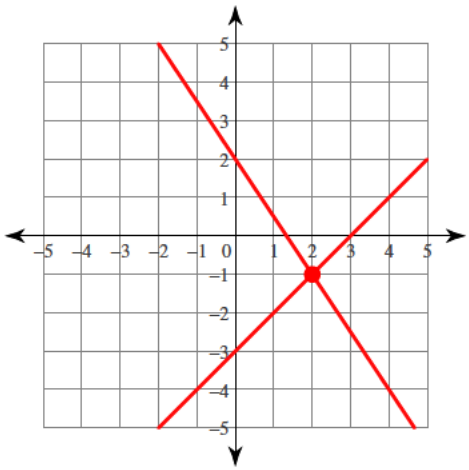
(2, –4)

29) $x = -4$
$x + y = -3$



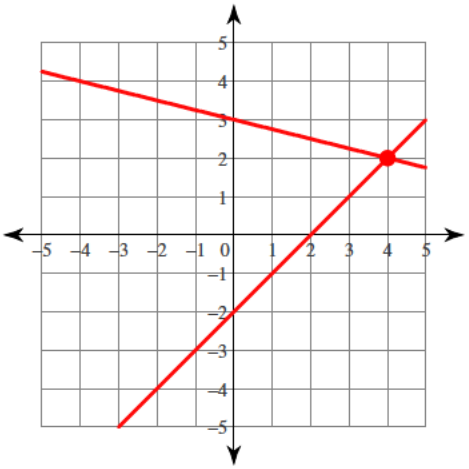
(–4, 1)

30) $x - y = 3$
$3x + 2y = 4$



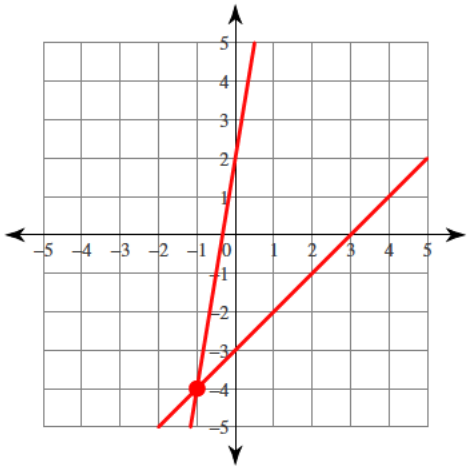
(2, –1)

31) $x - y = 2$
$x + 4y = 12$



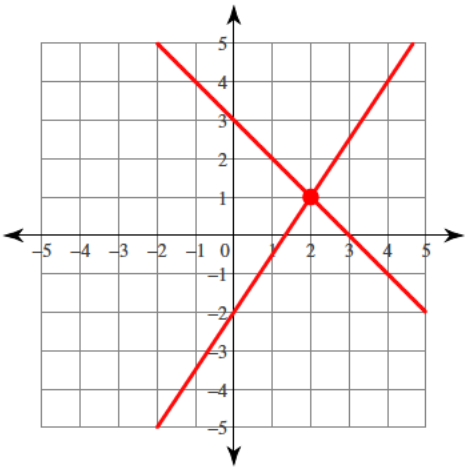
(4, 2)

32) $x - y = 3$
$6x - y = -2$



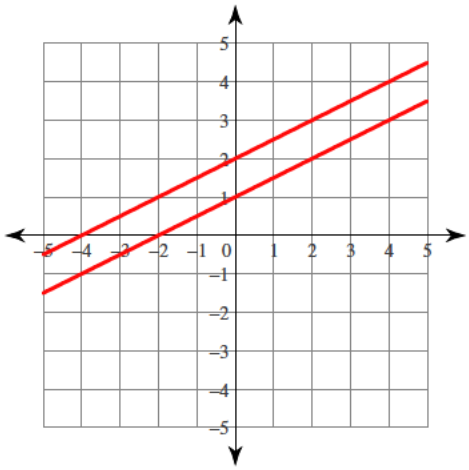
(–1, –4)

33) $x + y = 3$
$3x - 2y = 4$



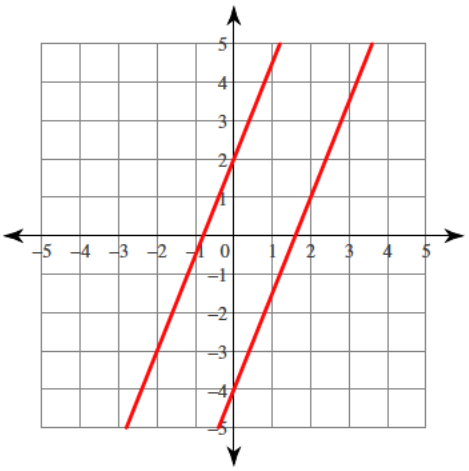
(2, 1)

34) $x - 2y = -2$
$x - 2y = -4$



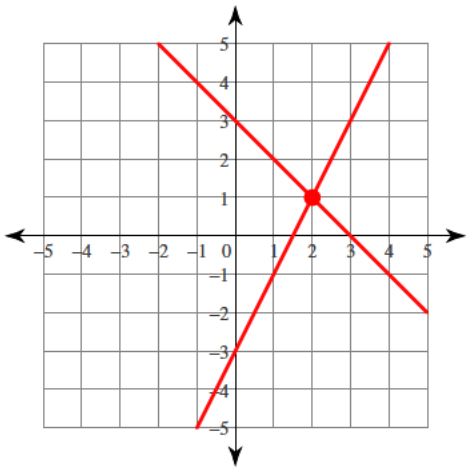
No solution

35) $5x - 2y = -4$
$5x - 2y = 8$



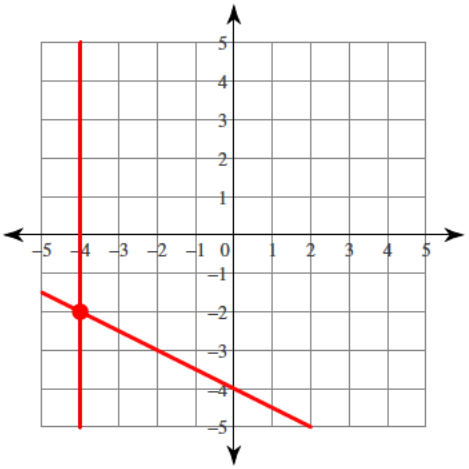
No solution

36) $x + y = 3$
$2x - y = 3$



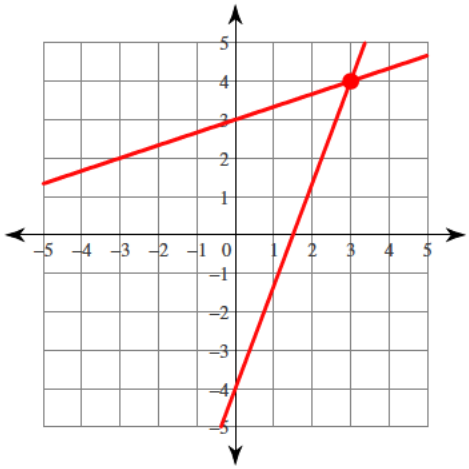
(2, 1)

37) $x + 2y = -8$
$x = -4$



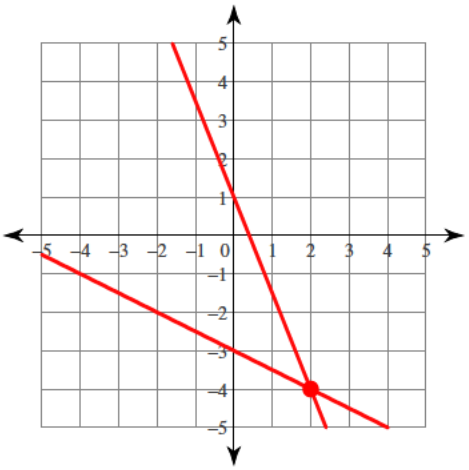
(–4, –2)

38) $x - 3y = -9$
$8x - 3y = 12$



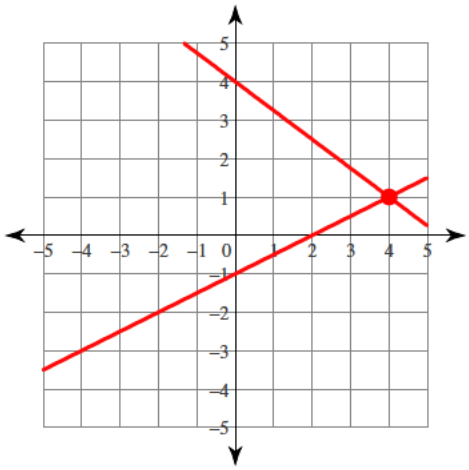
(3, 4)

39) $x + 2y = -6$
$5x + 2y = 2$



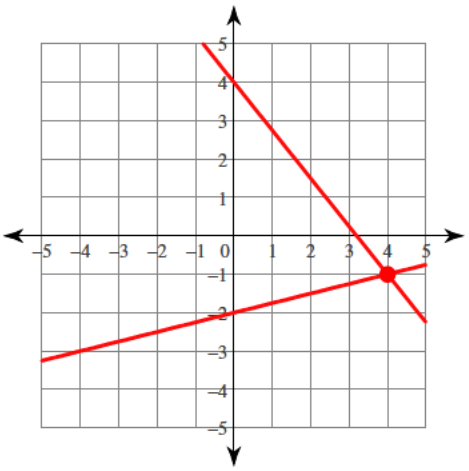
(2, –4)

40) $x - 2y = 2$
$3x + 4y = 16$



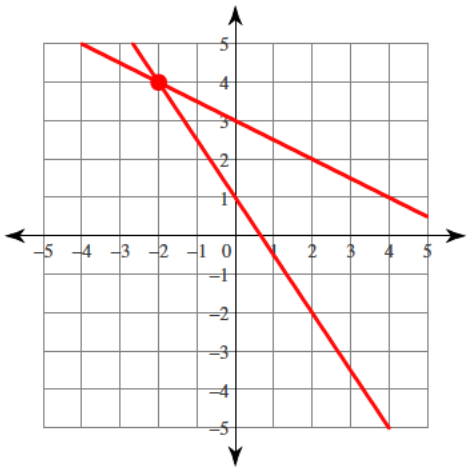
(4, 1)

41) $x - 4y = 8$
$5x + 4y = 16$



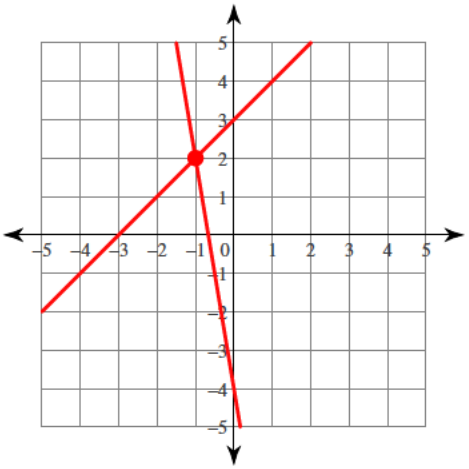
(4, –1)

42) $x + 2y = 6$
$3x + 2y = 2$



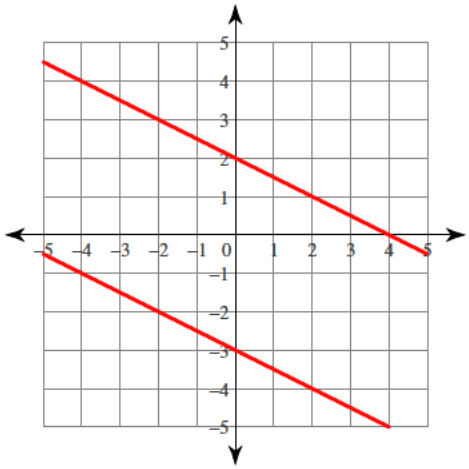
(–2, 4)

43) $6x + y = -4$
$x - y = -3$



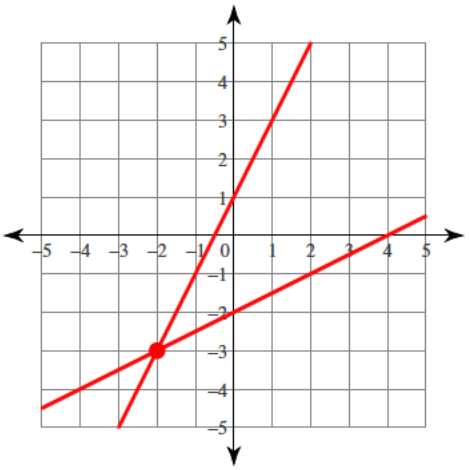
(–1, 2)

44) $x + 2y = 4$
$x + 2y = -6$



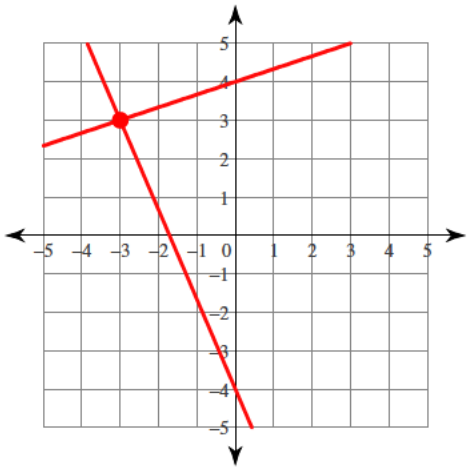
No solution

45) $2x - y = -1$
$x - 2y = 4$



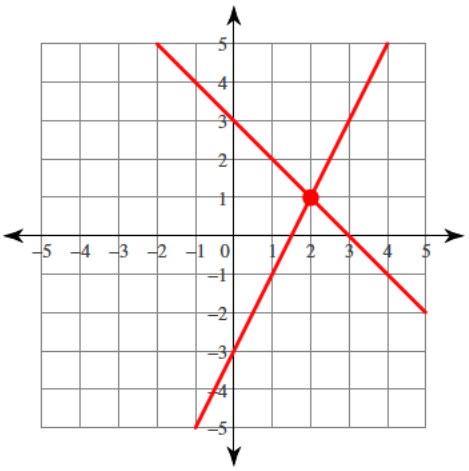
(–2, –3)

46) $x - 3y = -12$
$7x + 3y = -12$



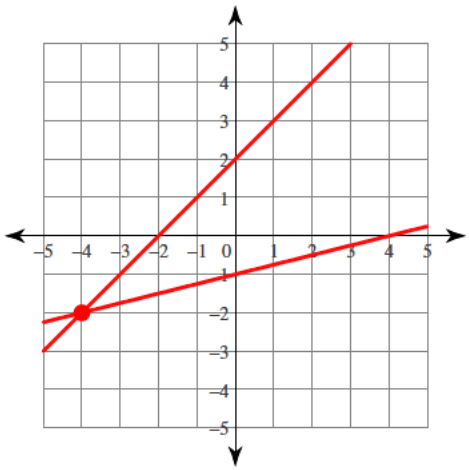
(–3, 3)

47) $2x - y = 3$
$x + y = 3$



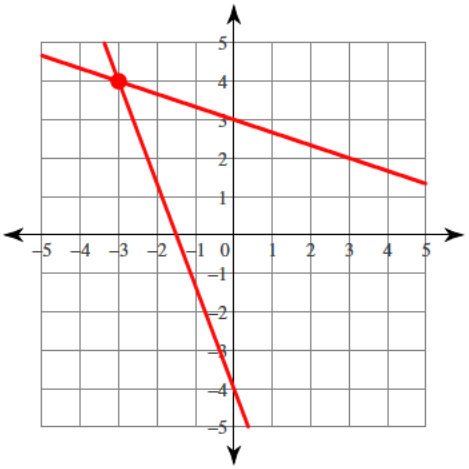
(2, 1)

48) $x - y = -2$
$x - 4y = 4$



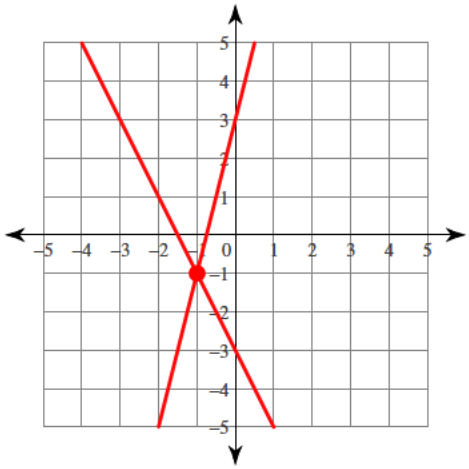
(–4, –2)

49) $8x + 3y = -12$
$x + 3y = 9$



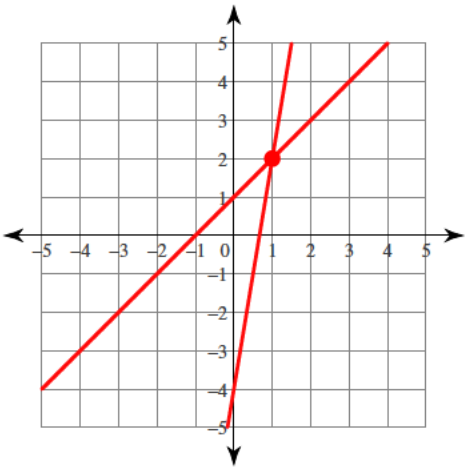
(–3, 4)

50) $2x + y = -3$
$4x - y = -3$



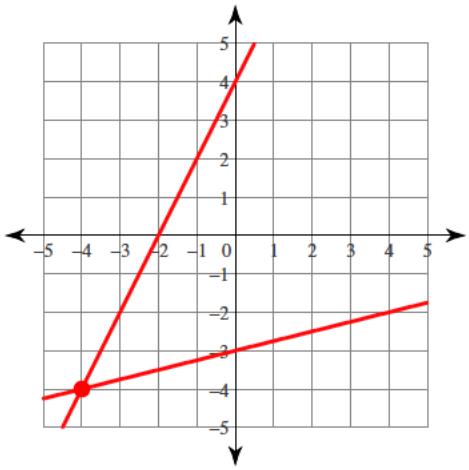
(–1, –1)

51) $6x - y = 4$
$x - y = -1$



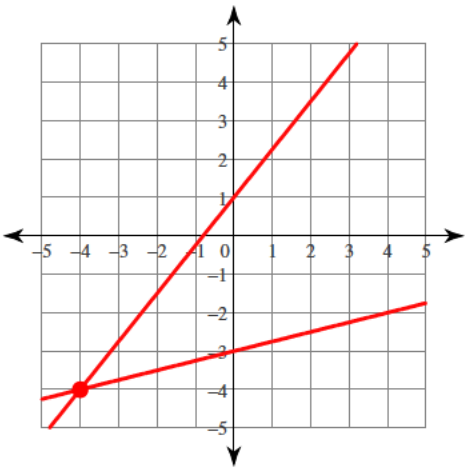
(1, 2)

52) $2x - y = -4$
$x - 4y = 12$



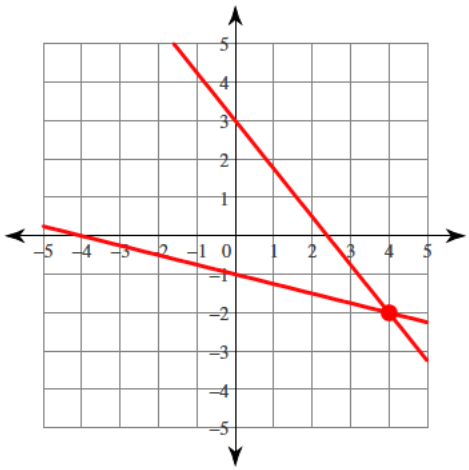
(–4, –4)

53) $5x - 4y = -4$
$x - 4y = 12$



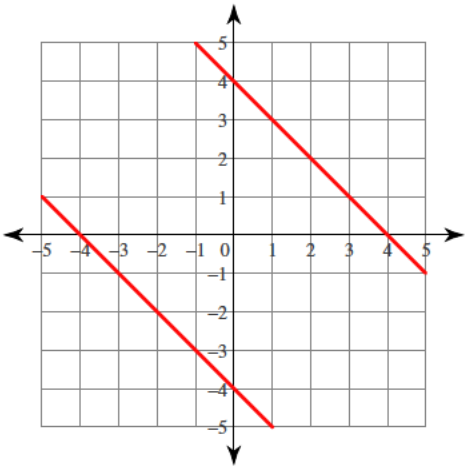
(–4, –4)

54) $x + 4y = -4$
$5x + 4y = 12$



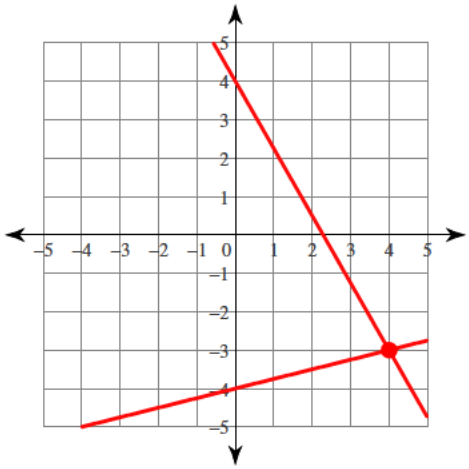
(4, –2)

55) $x + y = 4$
$x + y = -4$



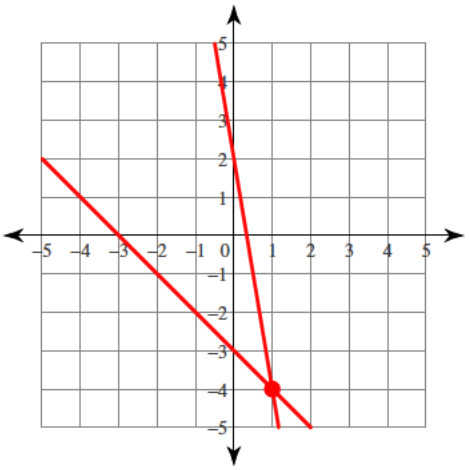
No solution

56) $7x + 4y = 16$
$x - 4y = 16$



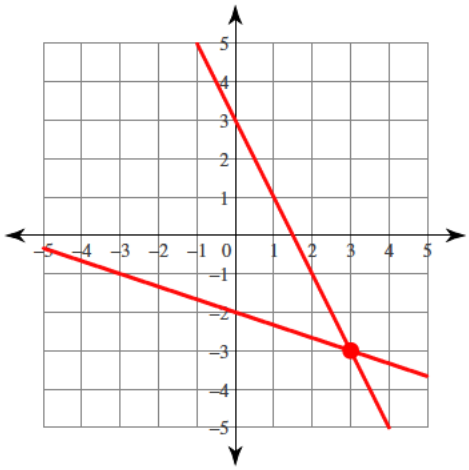
(4, –3)

57) $x + y = -3$
$6x + y = 2$



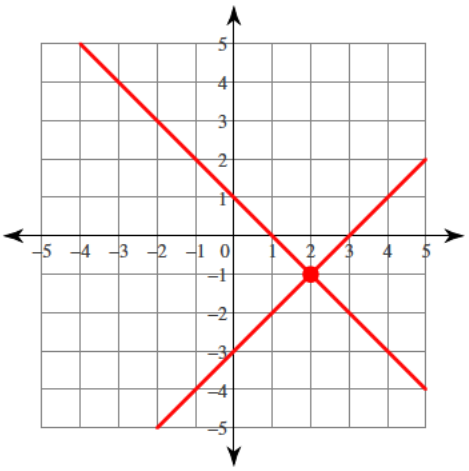
(1, –4)

58) $x + 3y = -6$
$2x + y = 3$



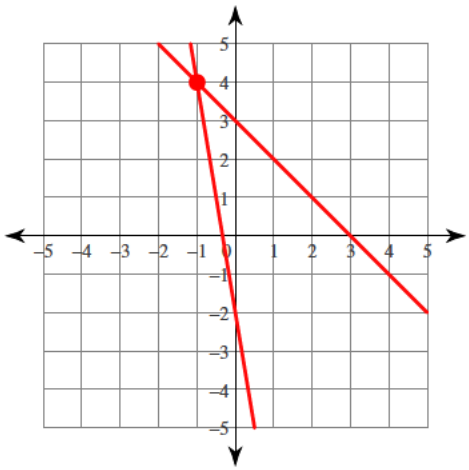
(3, –3)

59) $x + y = 1$
$x - y = 3$



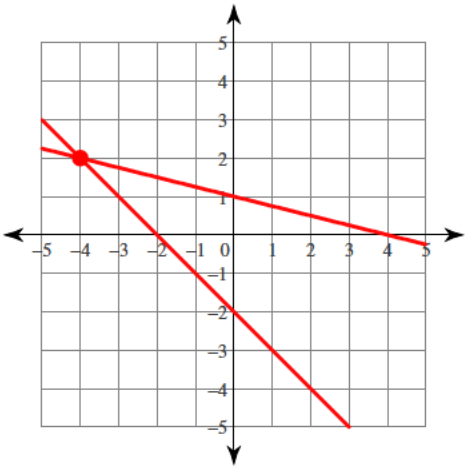
(2, –1)

60) $6x + y = -2$
$x + y = 3$



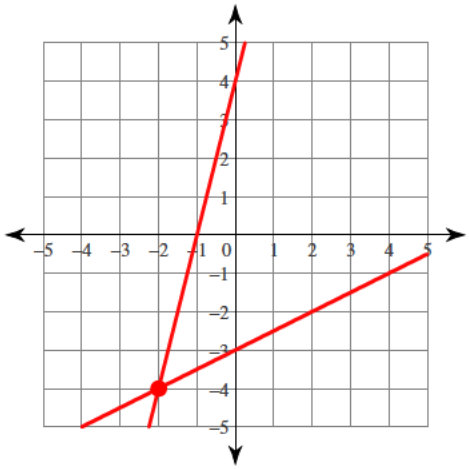
(–1, 4)

61) $x + 4y = 4$
$x + y = -2$



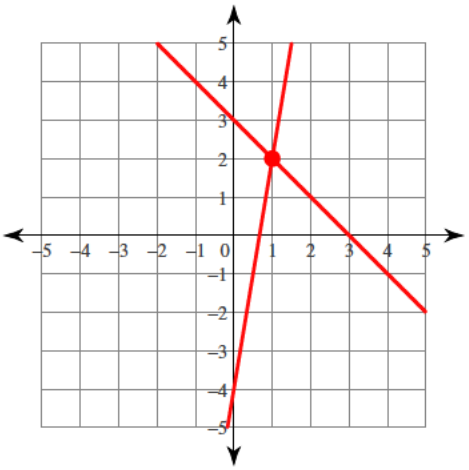
(–4, 2)

62) $x - 2y = 6$
$4x - y = -4$



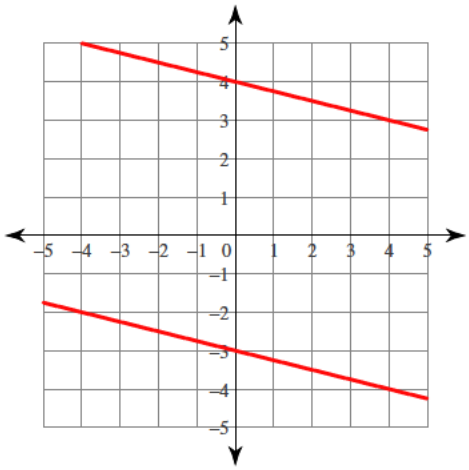
(–2, –4)

63) $x + y = 3$
$6x - y = 4$



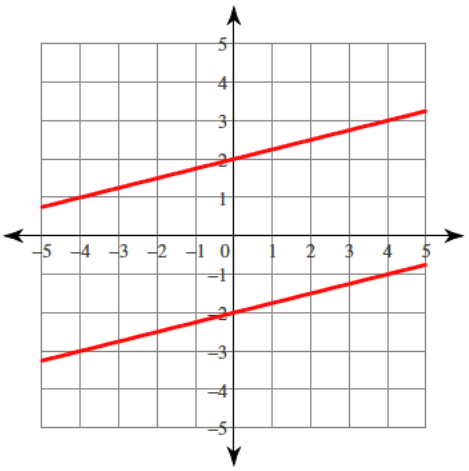
(1, 2)

64) $x + 4y = 16$
$x + 4y = -12$



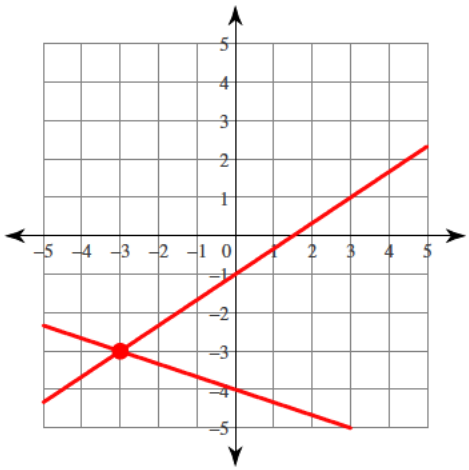
No solution

65) $x - 4y = -8$
$x - 4y = 8$



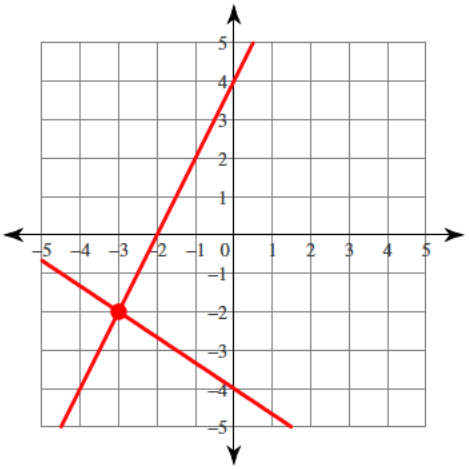
No solution

66) $x + 3y = -12$
$2x - 3y = 3$



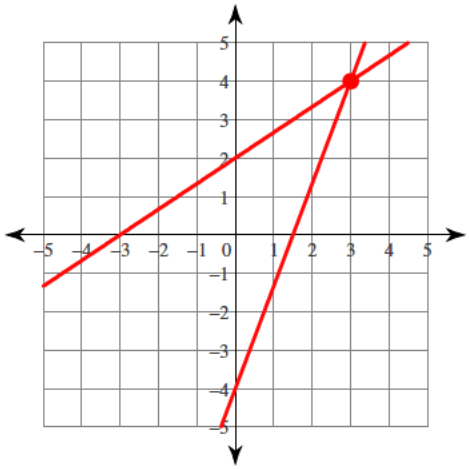
(–3, –3)

67) $2x - y = -4$
$2x + 3y = -12$



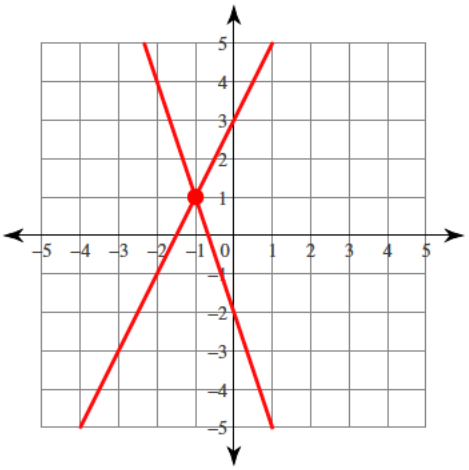
$(-3, -2)$

68) $8x - 3y = 12$
$2x - 3y = -6$



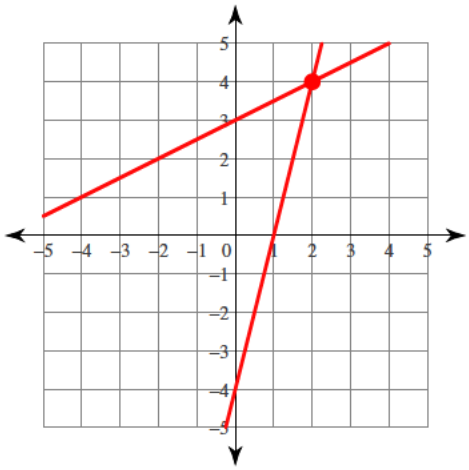
$(3, 4)$

69) $2x - y = -3$
$3x + y = -2$



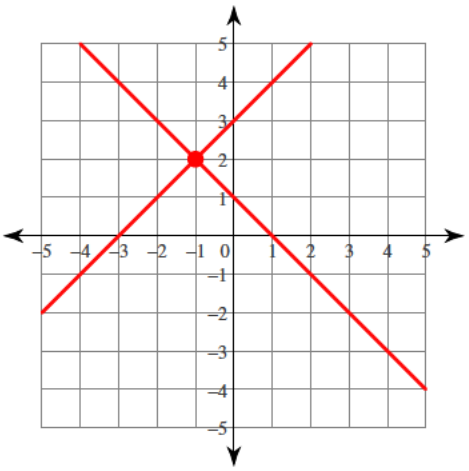
$(-1, 1)$

70) $4x - y = 4$
$x - 2y = -6$



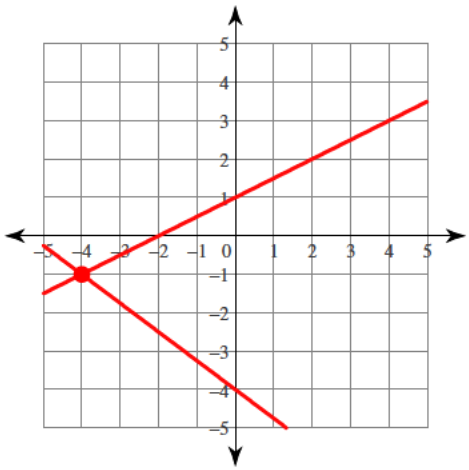
$(2, 4)$

71) $x + y = 1$
$x - y = -3$



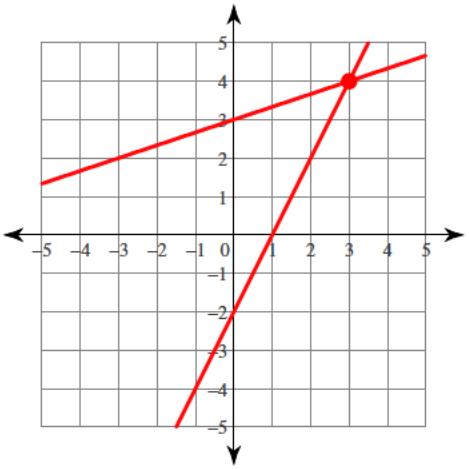
$(-1, 2)$

72) $x - 2y = -2$
$3x + 4y = -16$



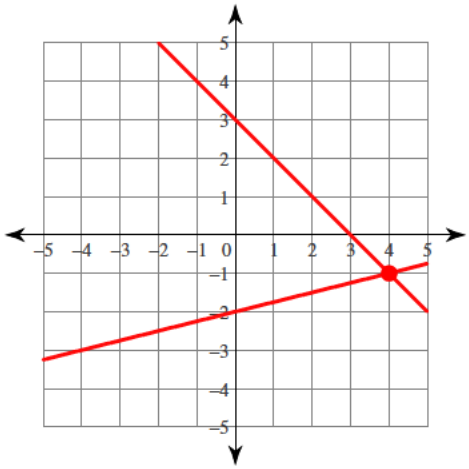
$(-4, -1)$

73) $x - 3y = -9$
$2x - y = 2$



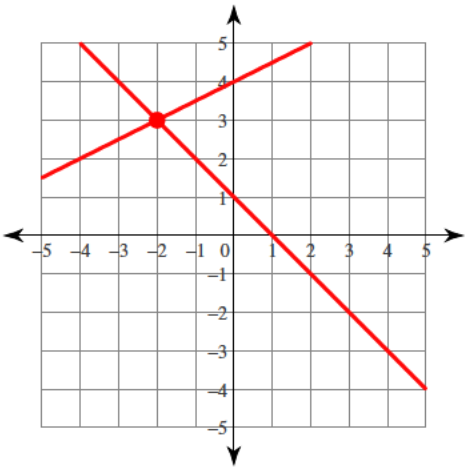
(3, 4)

74) $x + y = 3$
$x - 4y = 8$



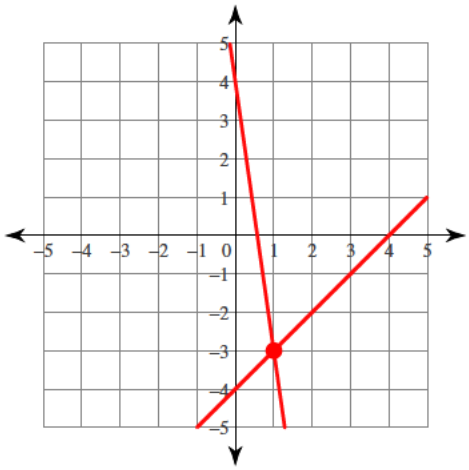
(4, –1)

75) $x - 2y = -8$
$x + y = 1$



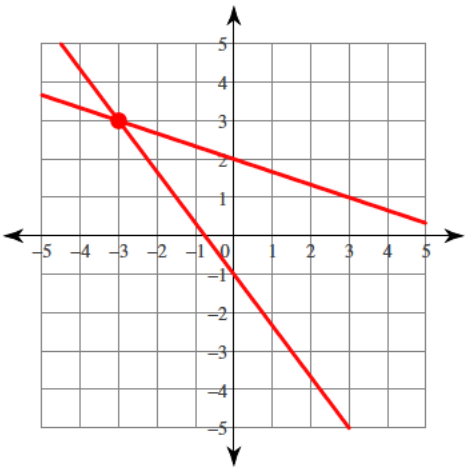
(–2, 3)

76) $7x + y = 4$
$x - y = 4$



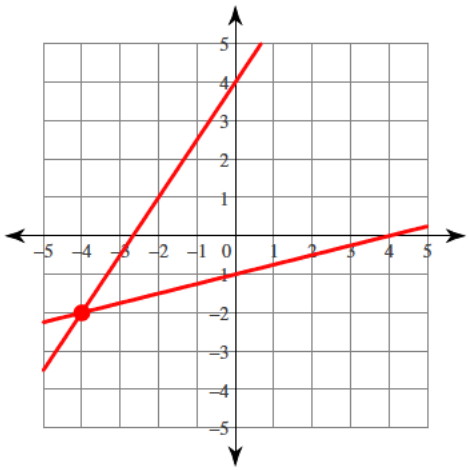
(1, –3)

77) $4x + 3y = -3$
$x + 3y = 6$



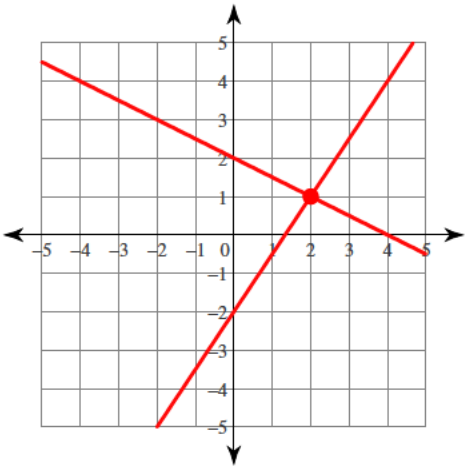
(–3, 3)

78) $3x - 2y = -8$
$x - 4y = 4$



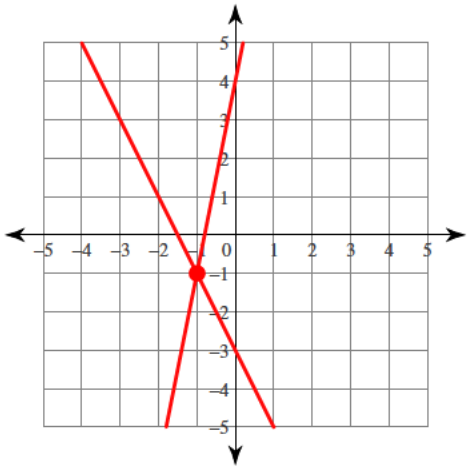
(–4, –2)

79) $x + 2y = 4$
$3x - 2y = 4$



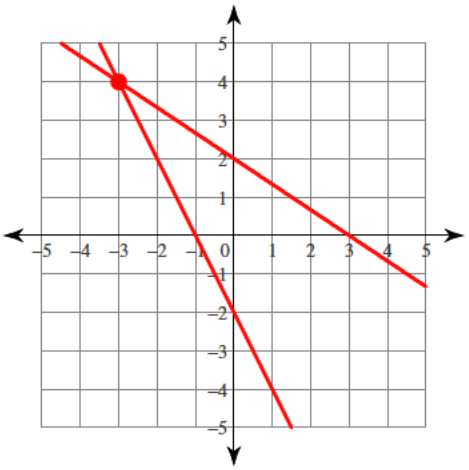
(2, 1)

80) $5x - y = -4$
$2x + y = -3$



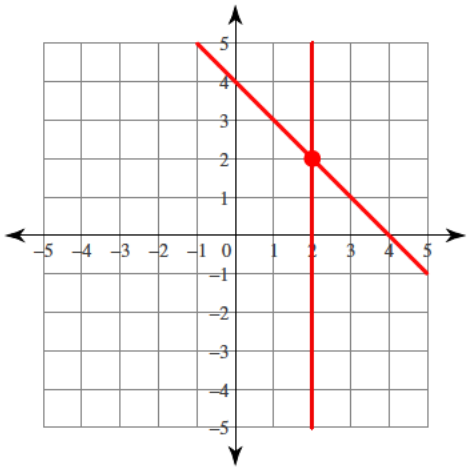
(–1, –1)

81) $2x + 3y = 6$
$2x + y = -2$



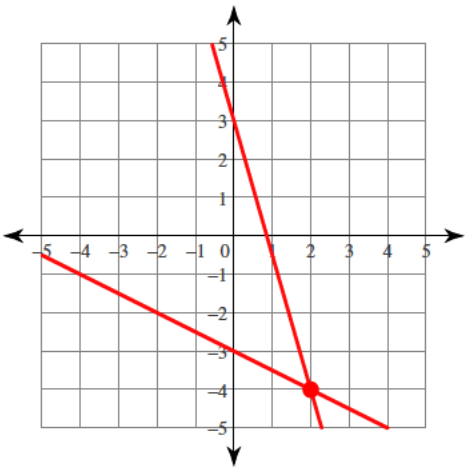
(–3, 4)

82) $x + y = 4$
$x = 2$



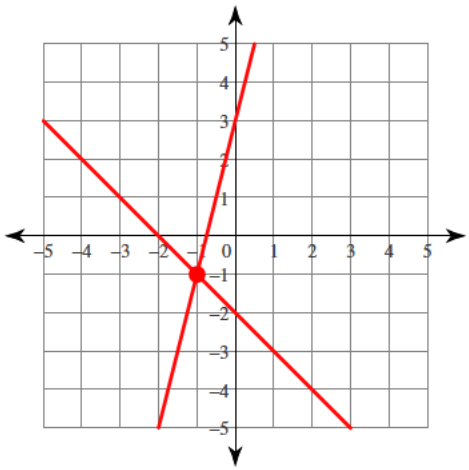
(2, 2)

83) $7x + 2y = 6$
$x + 2y = -6$



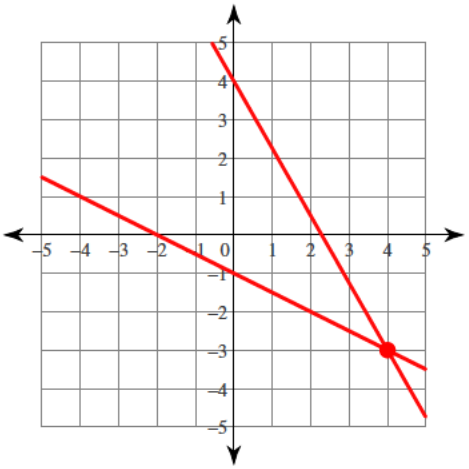
(2, –4)

84) $x + y = -2$
$4x - y = -3$



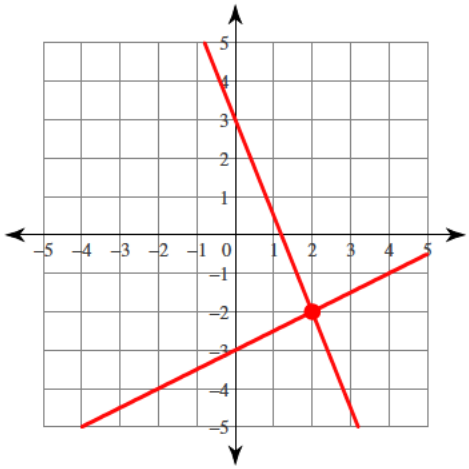
(–1, –1)

85) $x + 2y = -2$
$7x + 4y = 16$



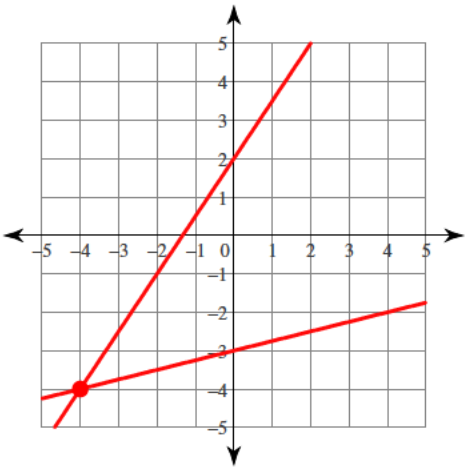
(4, –3)

86) $5x + 2y = 6$
$x - 2y = 6$



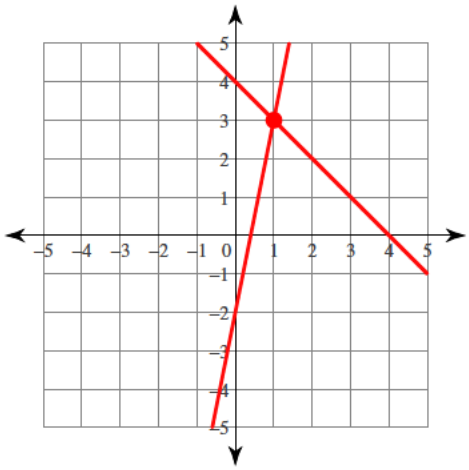
(2, –2)

87) $x - 4y = 12$
$3x - 2y = -4$



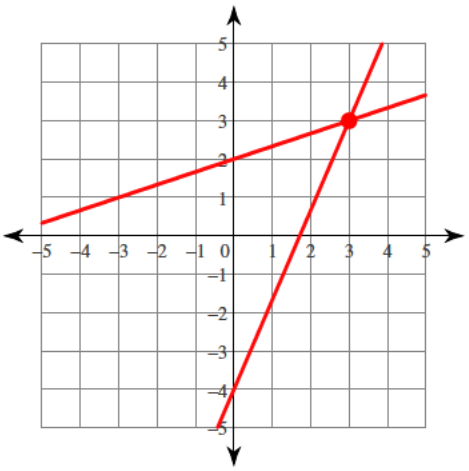
(–4, –4)

88) $5x - y = 2$
$x + y = 4$



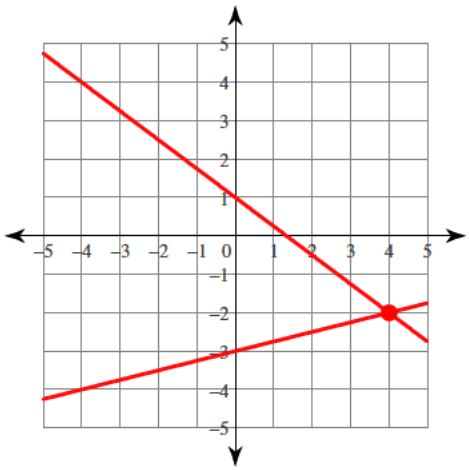
(1, 3)

89) $7x - 3y = 12$
$x - 3y = -6$



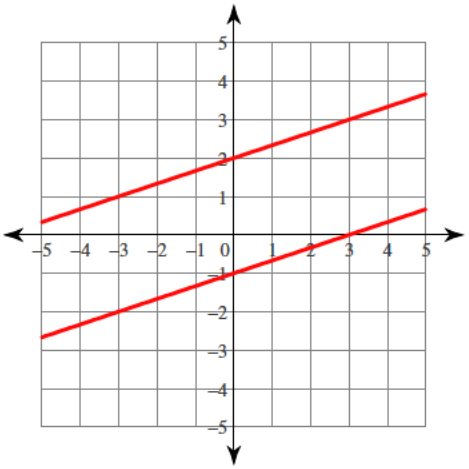
(3, 3)

90) $3x + 4y = 4$
$x - 4y = 12$



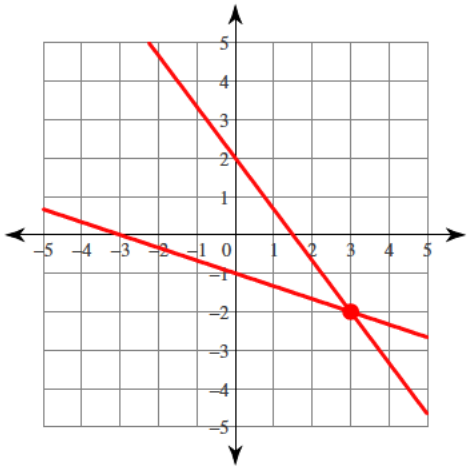
(4, –2)

91) $x - 3y = -6$
$x - 3y = 3$



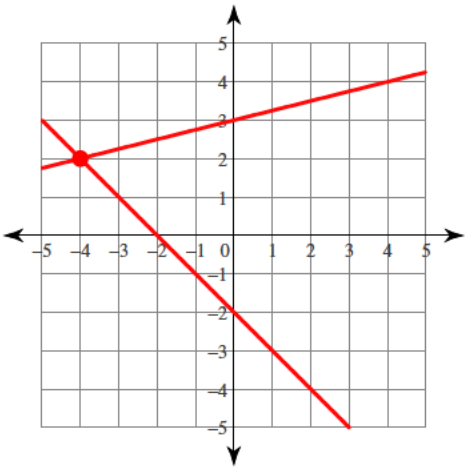
No solution

92) $4x + 3y = 6$
$x + 3y = -3$



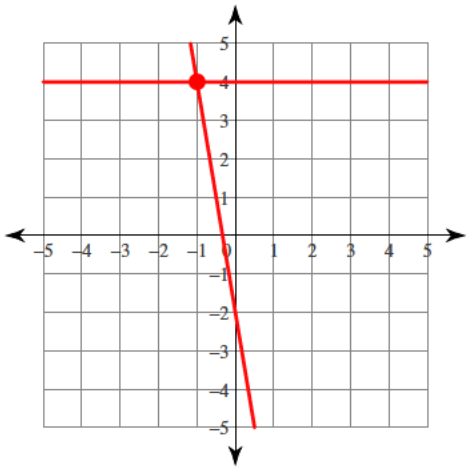
(3, –2)

93) $x - 4y = -12$
$x + y = -2$



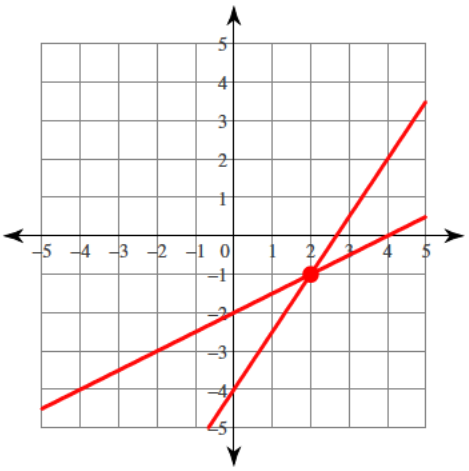
(–4, 2)

94) $6x + y = -2$
$y = 4$



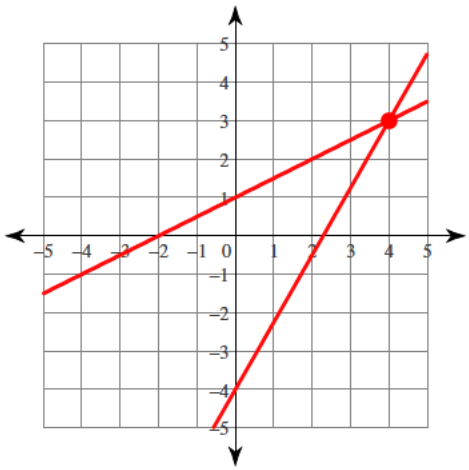
(–1, 4)

95) $3x - 2y = 8$
$x - 2y = 4$



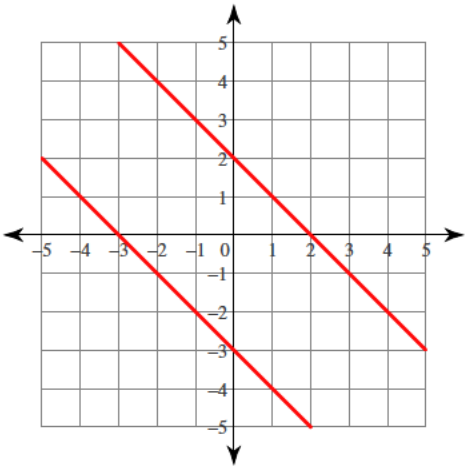
(2, –1)

96) $7x - 4y = 16$
$x - 2y = -2$



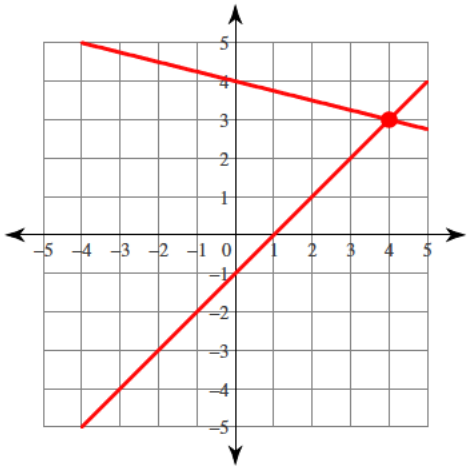
(4, 3)

97) $x + y = -3$
$x + y = 2$



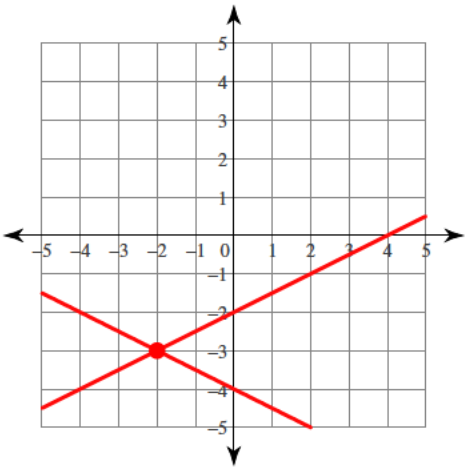
No solution

98) $x - y = 1$
$x + 4y = 16$



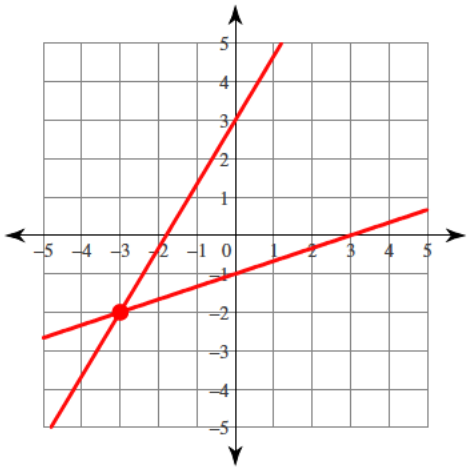
(4, 3)

99) $x - 2y = 4$
$x + 2y = -8$



(–2, –3)

100) $5x - 3y = -9$
$x - 3y = 3$

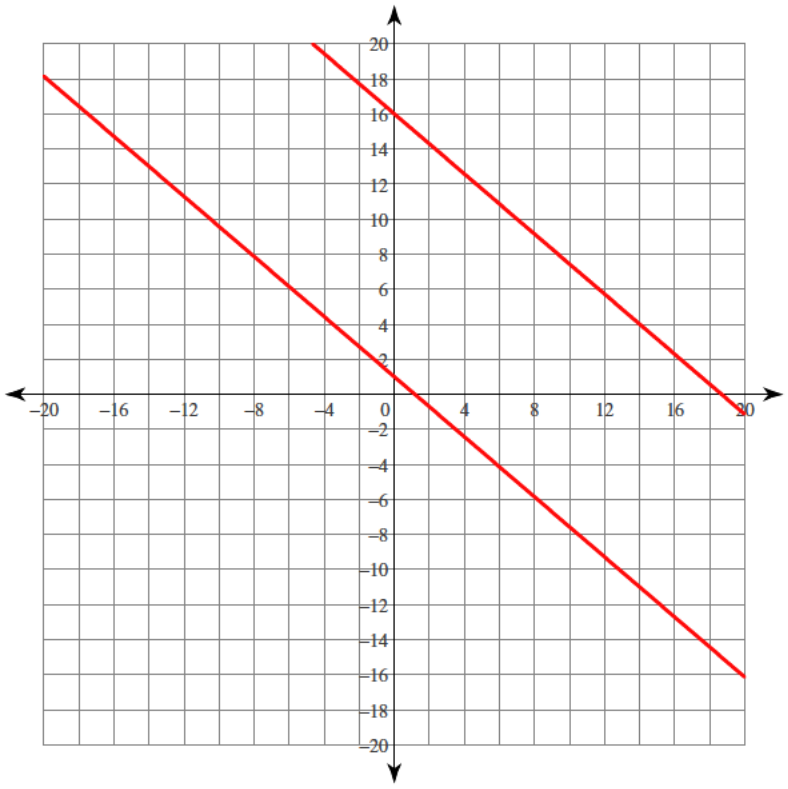


(–3, –2)

Solve each system by graphing.

101) $y = -\frac{6}{7}x + 1$

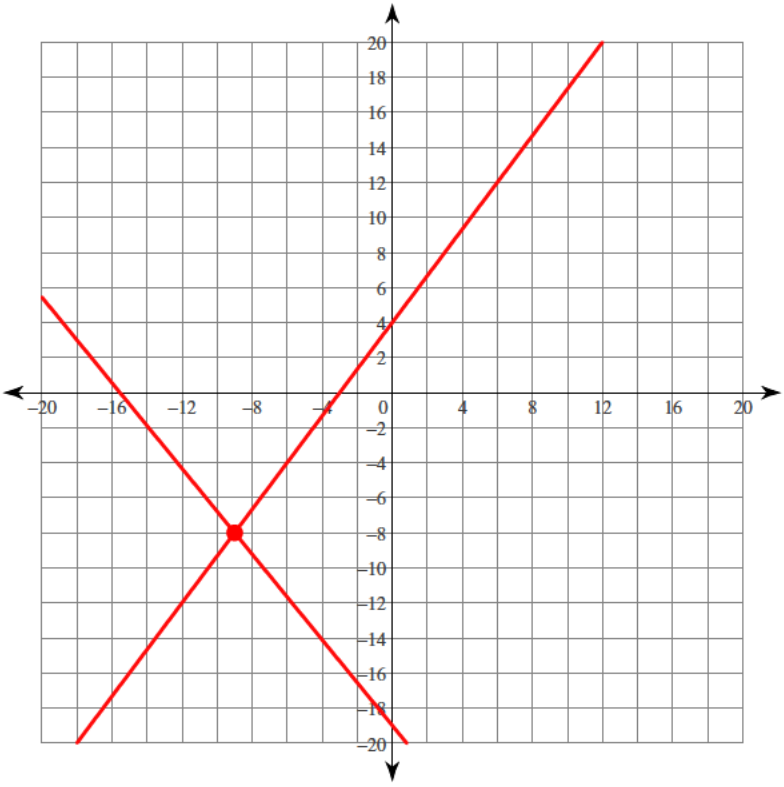
$y = -\frac{6}{7}x + 16$



No solution

102) $y = -\frac{11}{9}x - 19$

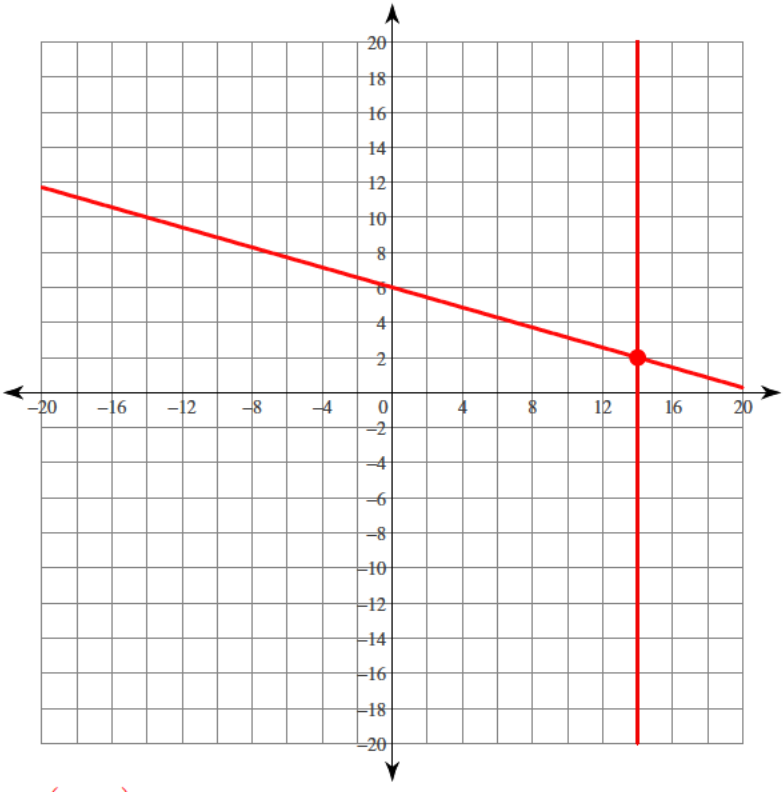
$y = \frac{4}{3}x + 4$



(–9, –8)

103) $x = 14$

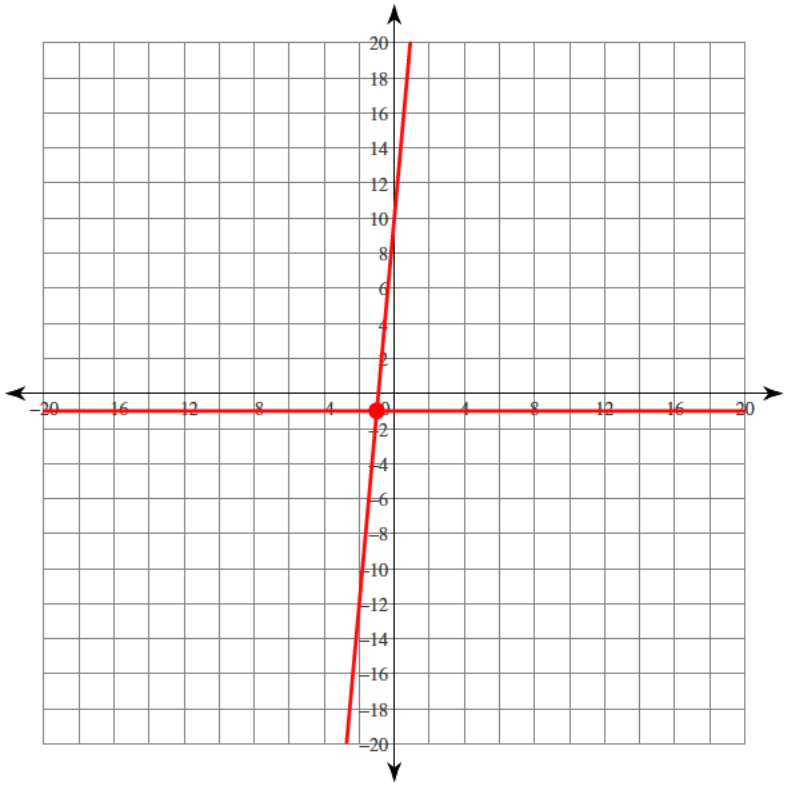
$y = -\frac{2}{7}x + 6$



(14, 2)

104) $y = -1$

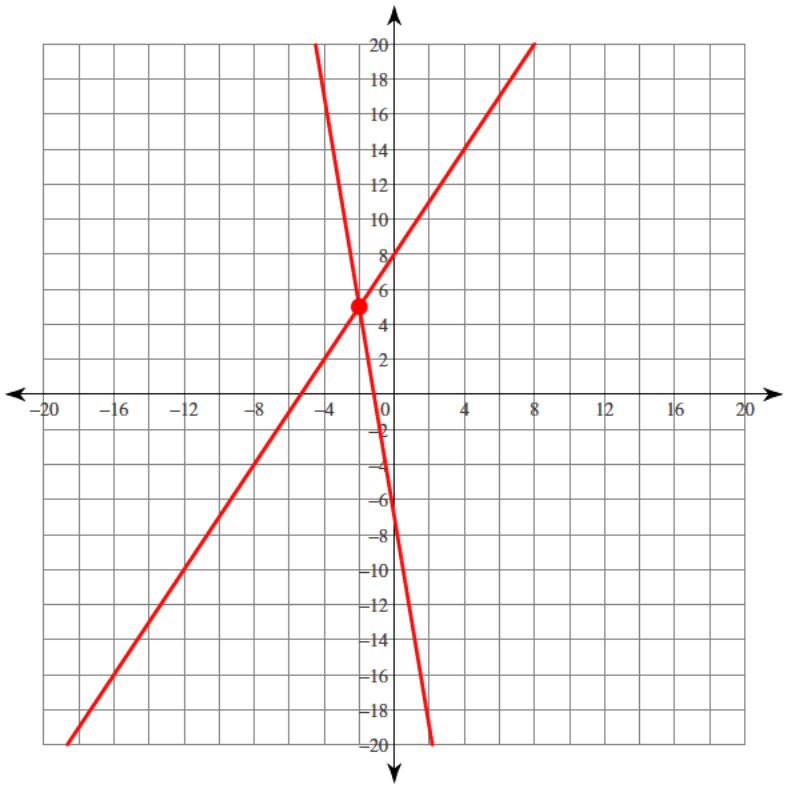
$y = 11x + 10$



$(-1, -1)$

105) $y = \frac{3}{2}x + 8$

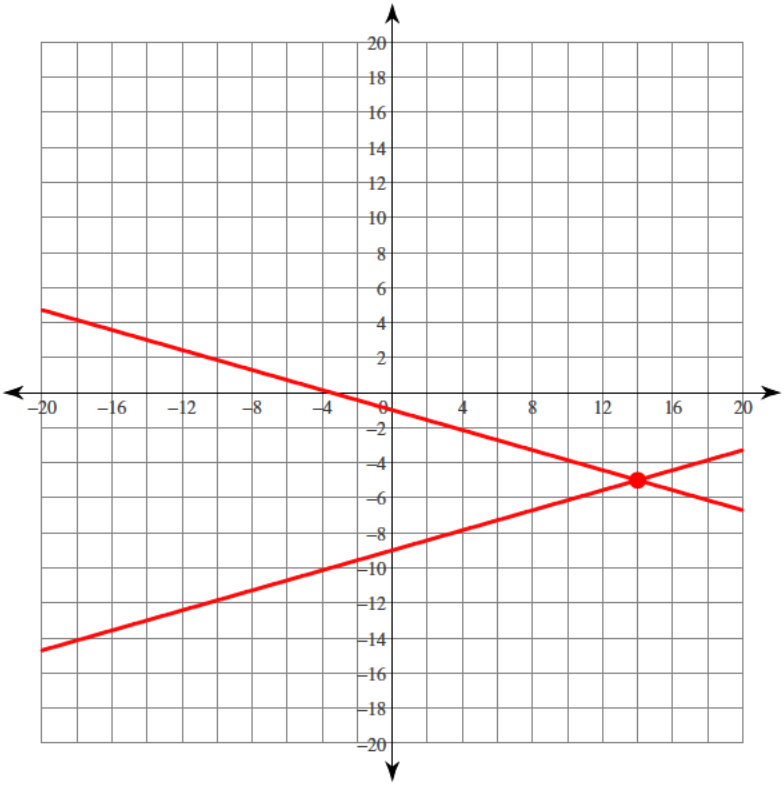
$y = -6x - 7$



$(-2, 5)$

106) $y = -\frac{2}{7}x - 1$

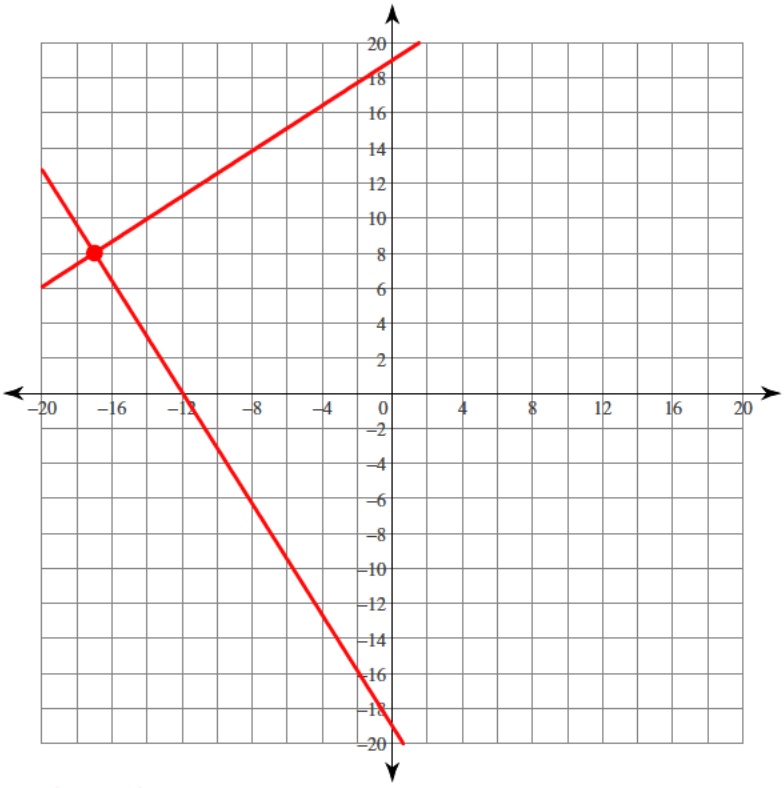
$y = \frac{2}{7}x - 9$



(14, –5)

107) $y = \frac{11}{17}x + 19$

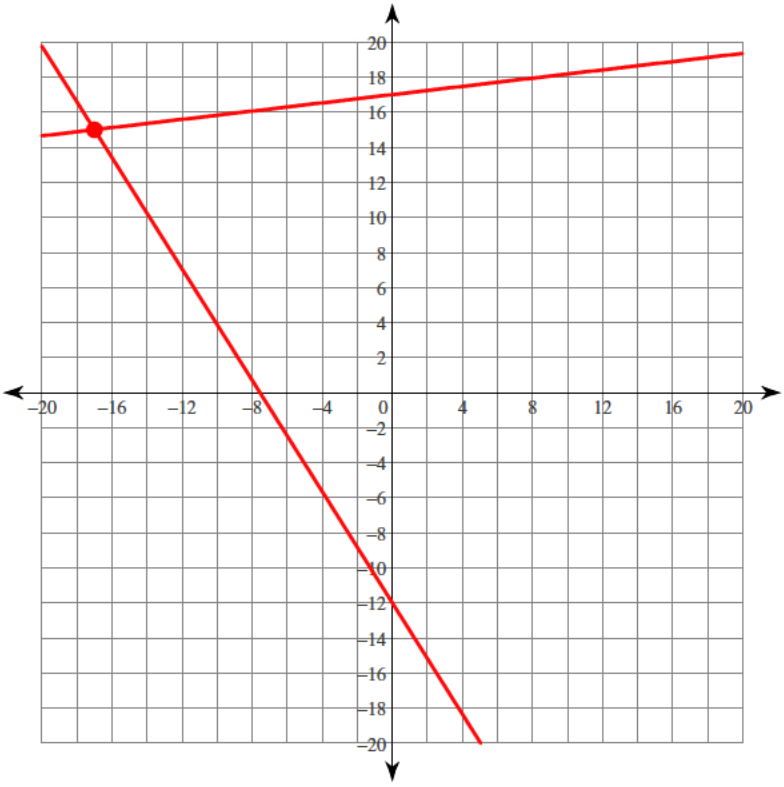
$y = -\frac{27}{17}x - 19$



(–17, 8)

108) $y = \frac{2}{17}x + 17$

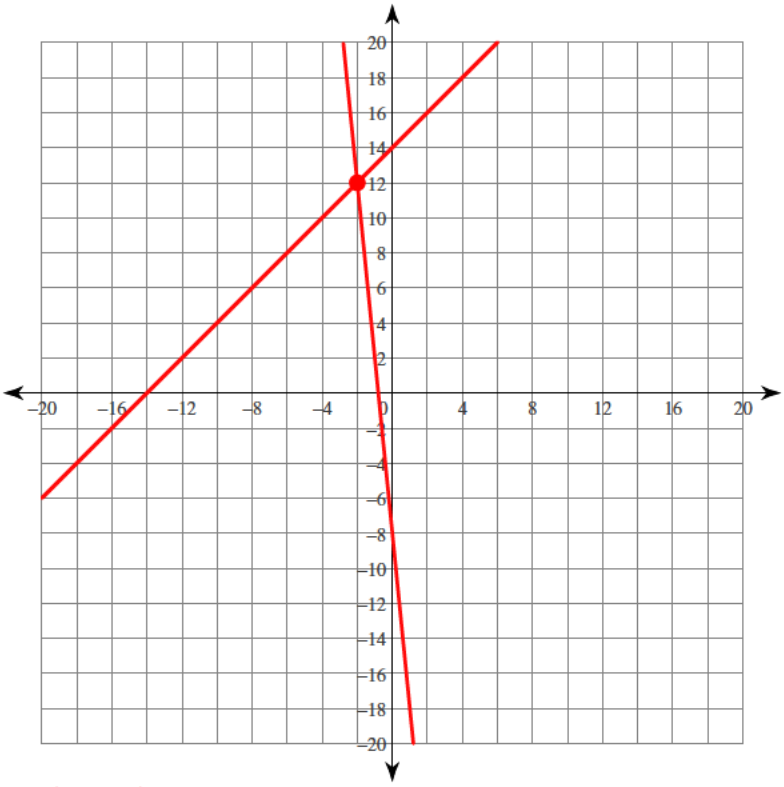
$y = -\frac{27}{17}x - 12$



(–17, 15)

109) $y = x + 14$

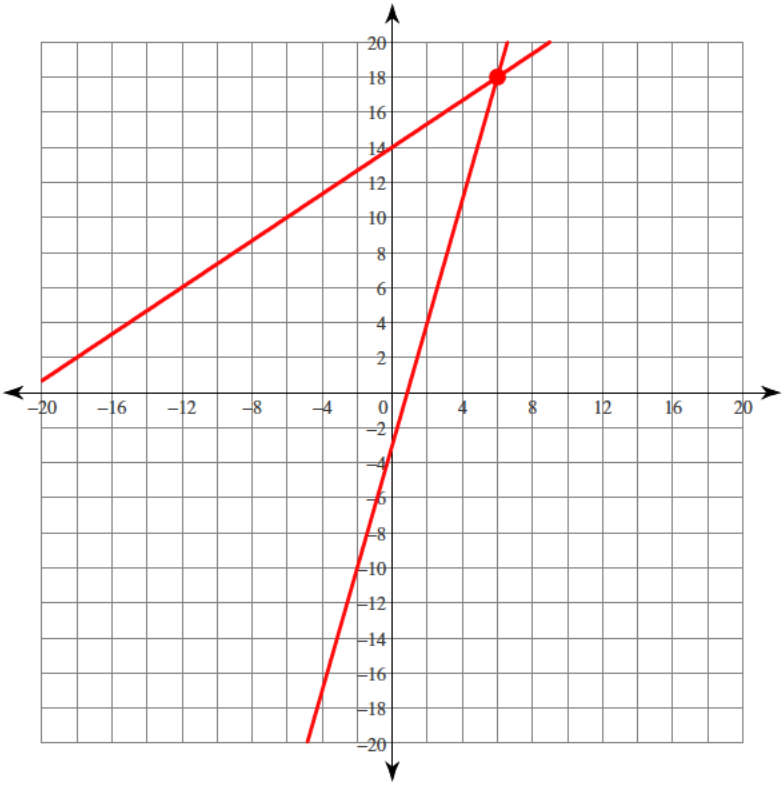
$y = -10x - 8$



(–2, 12)

110) $y = \frac{7}{2}x - 3$

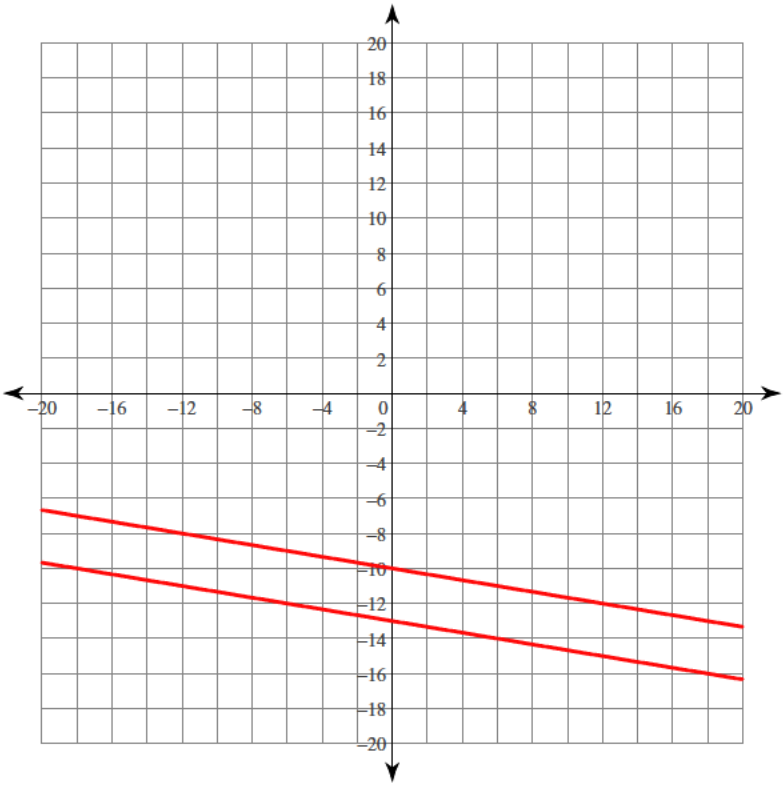
$y = \frac{2}{3}x + 14$



(6, 18)

111) $y = -\frac{1}{6}x - 13$

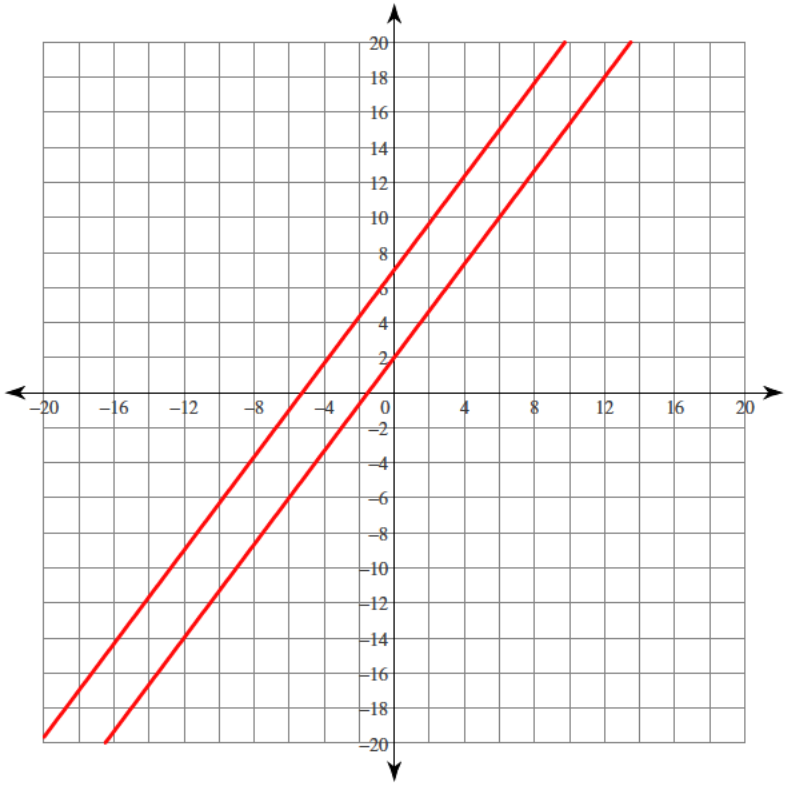
$y = -\frac{1}{6}x - 10$



No solution

112) $y = \frac{4}{3}x + 7$

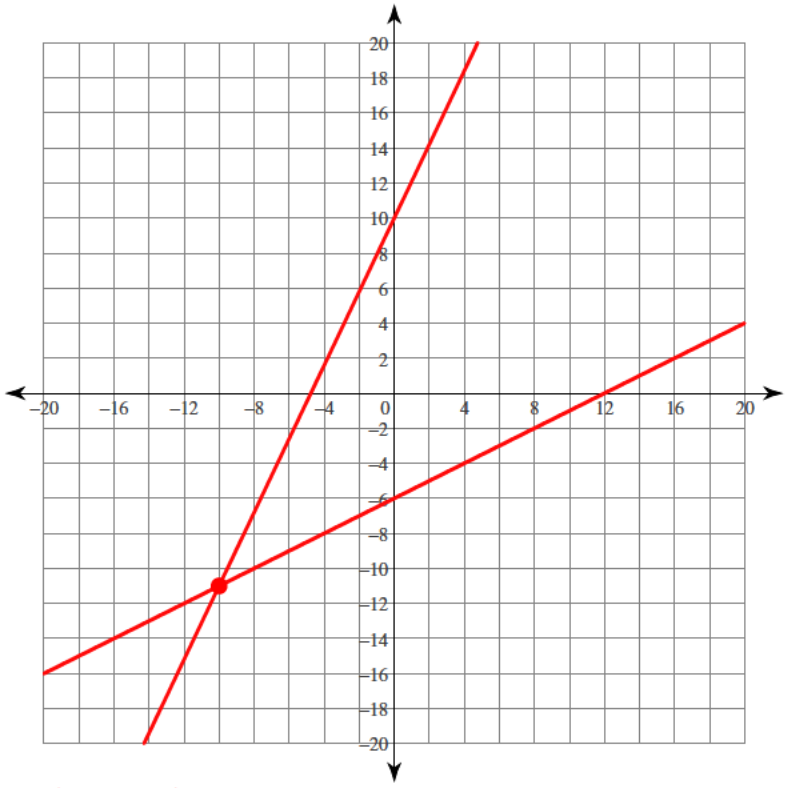
$y = \frac{4}{3}x + 2$



No solution

113) $y = \frac{21}{10}x + 10$

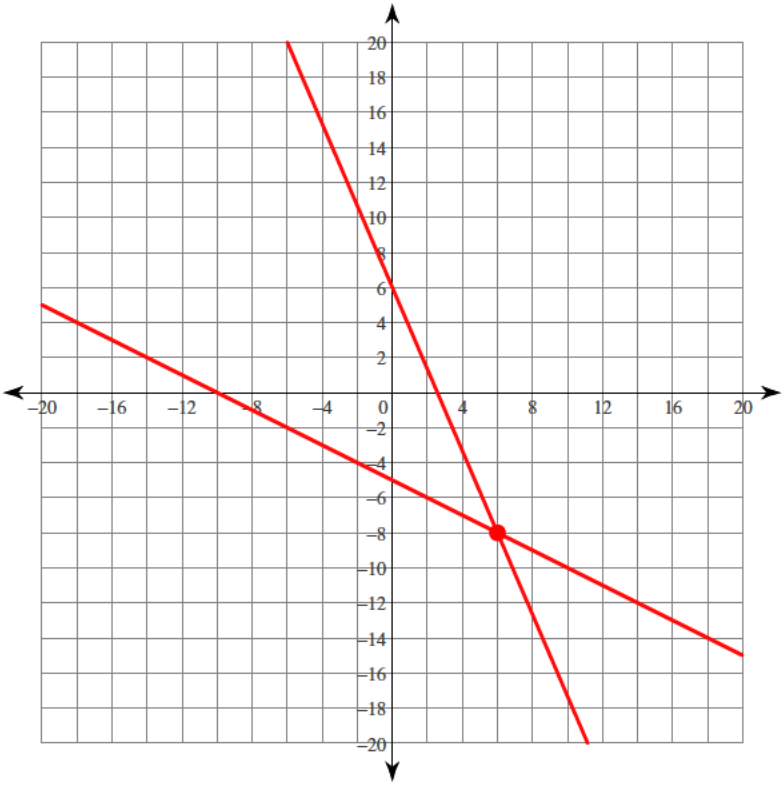
$y = \frac{1}{2}x - 6$



$(-10, -11)$

114) $y = -\frac{7}{3}x + 6$

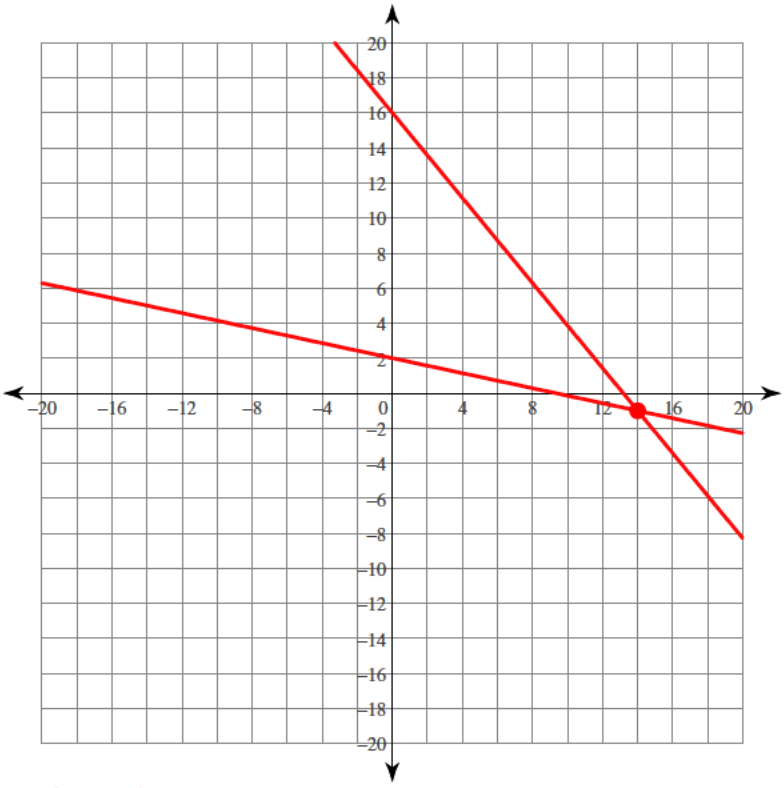
$y = -\frac{1}{2}x - 5$



(6, –8)

115) $y = -\frac{3}{14}x + 2$

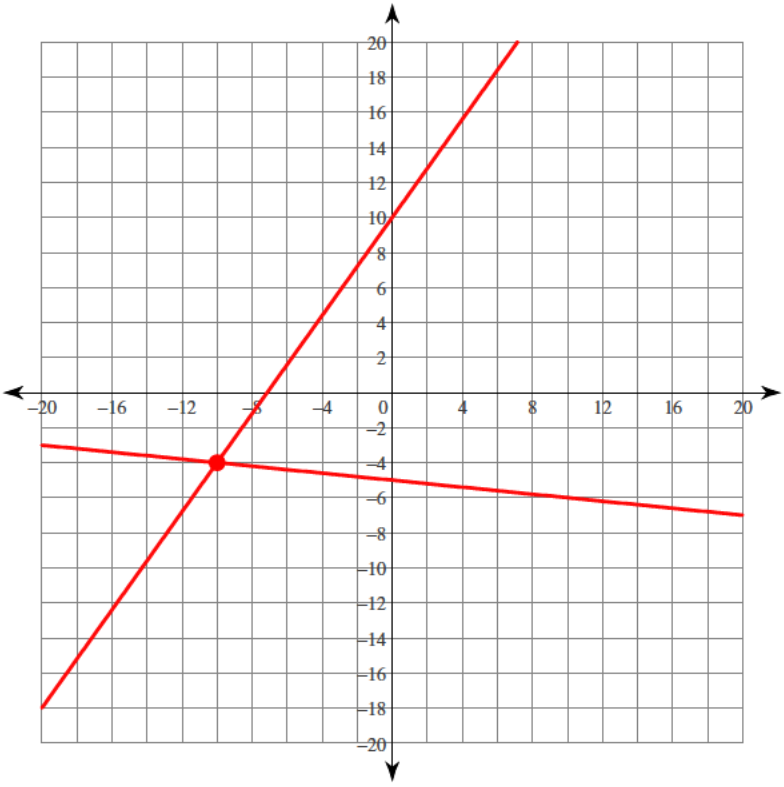
$y = -\frac{17}{14}x + 16$



(14, –1)

116) $y = \frac{7}{5}x + 10$

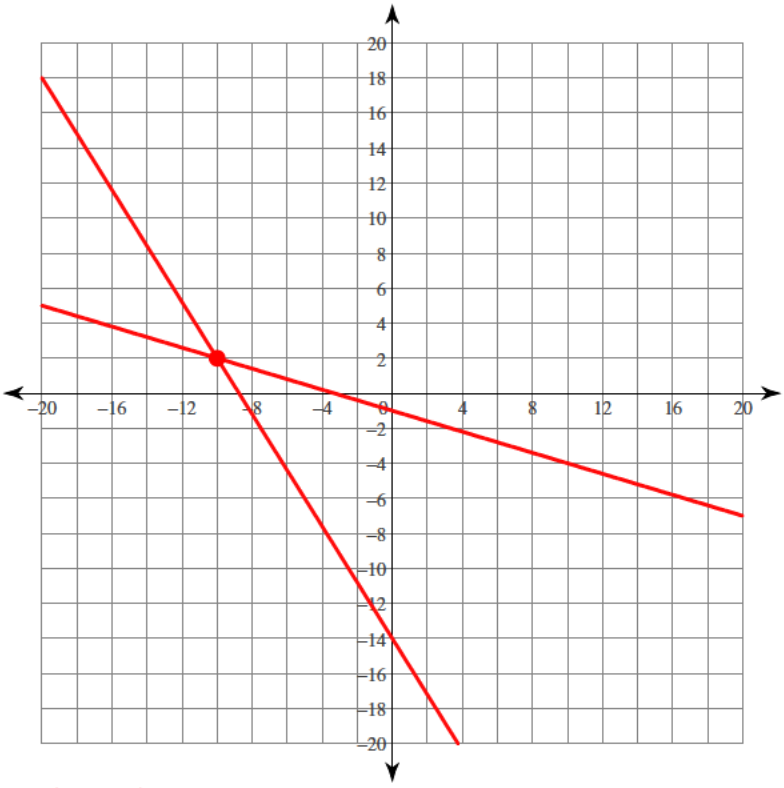
$y = -\frac{1}{10}x - 5$



(–10, –4)

117) $y = -\frac{8}{5}x - 14$

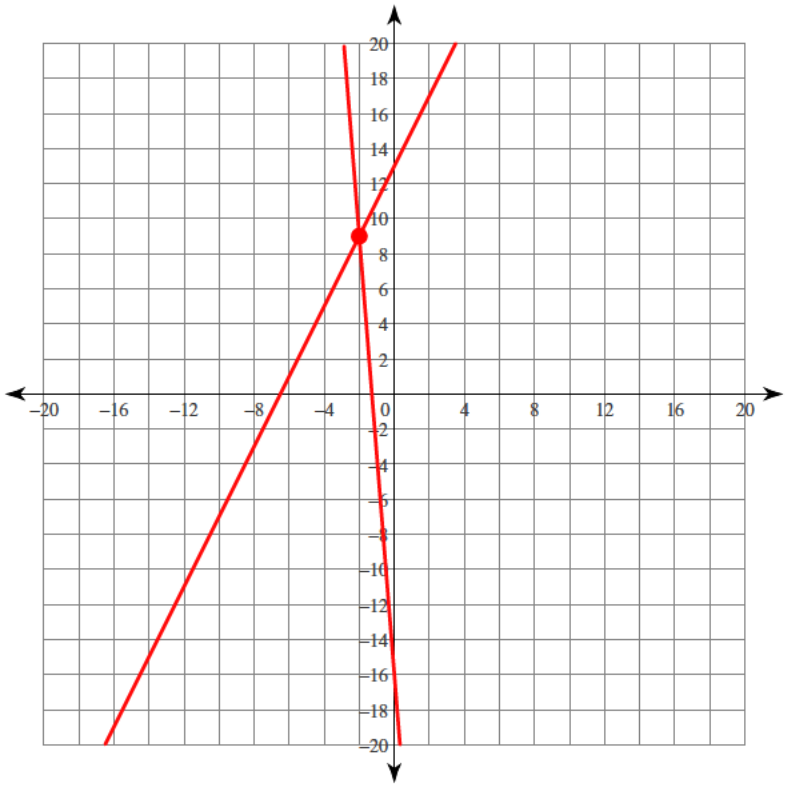
$y = -\frac{3}{10}x - 1$



(–10, 2)

118) $y = -\frac{25}{2}x - 16$

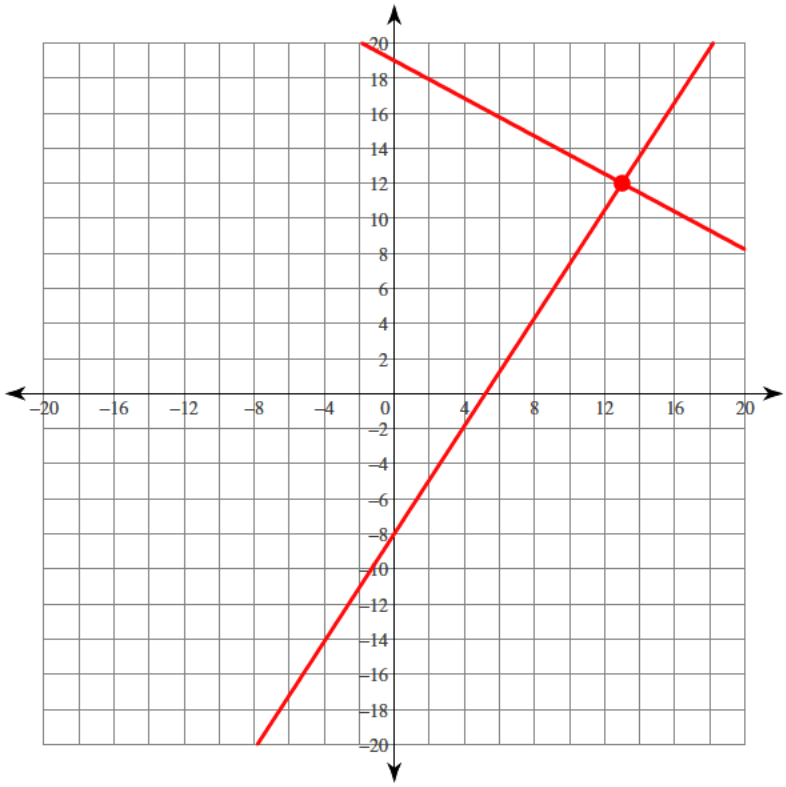
$y = 2x + 13$



(–2, 9)

119) $y = \frac{20}{13}x - 8$

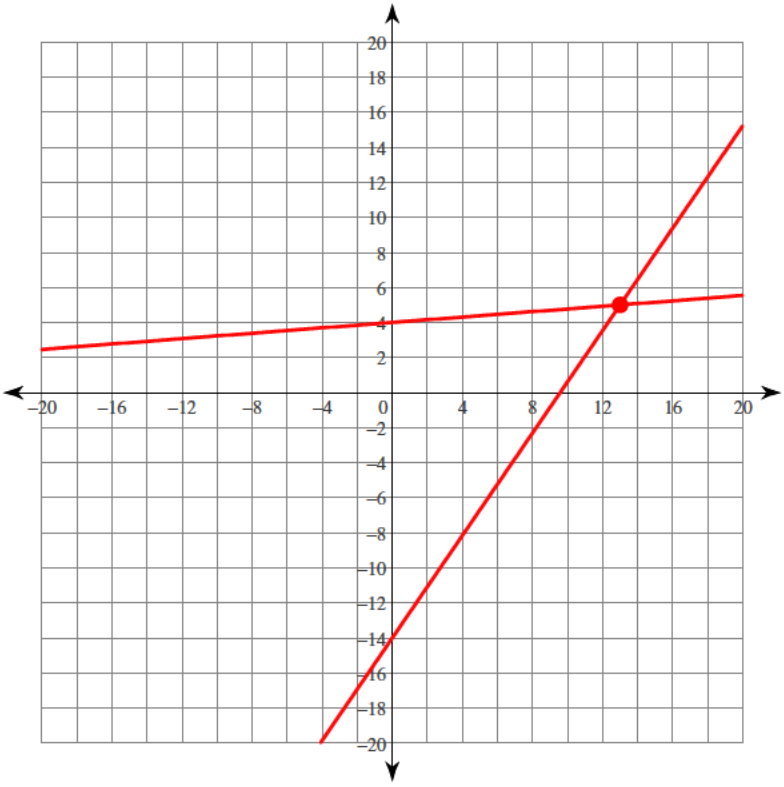
$y = -\frac{7}{13}x + 19$



(13, 12)

120) $y = \frac{1}{13}x + 4$

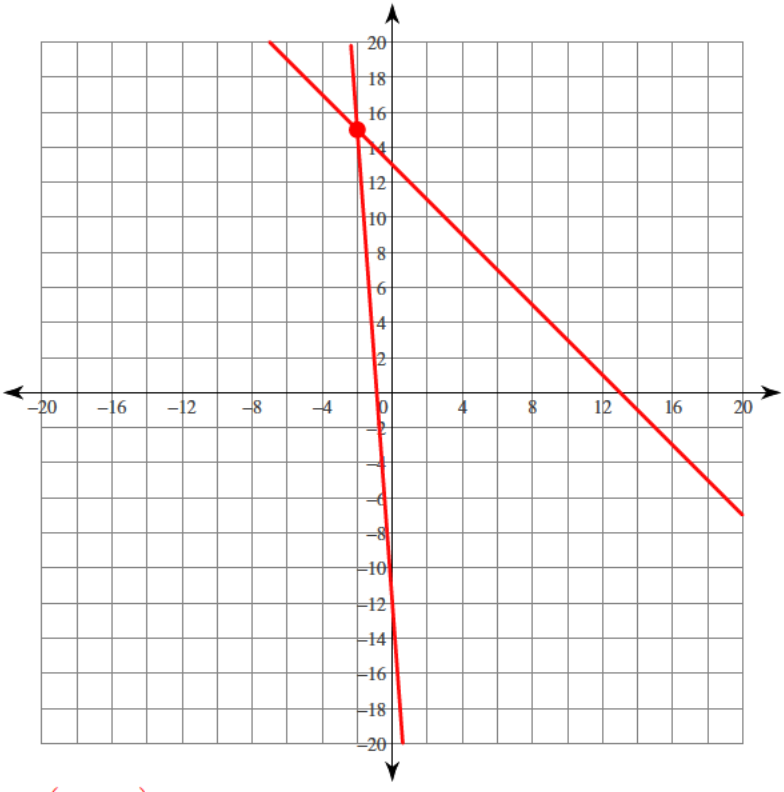
$y = \frac{19}{13}x - 14$



(13, 5)

121) $y = -x + 13$

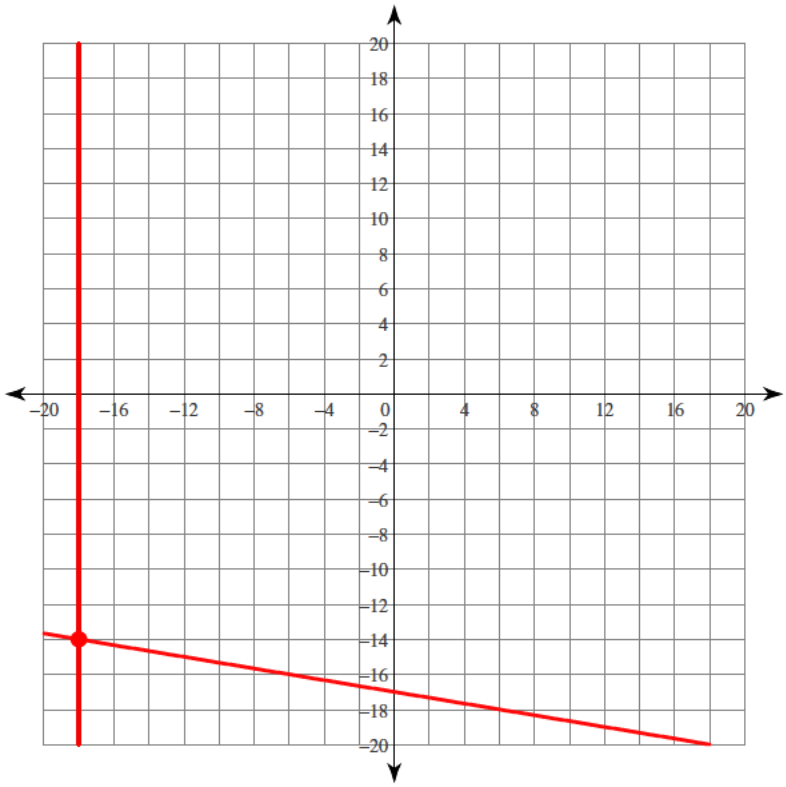
$y = -\frac{27}{2}x - 12$



(–2, 15)

122) $y = -\frac{1}{6}x - 17$

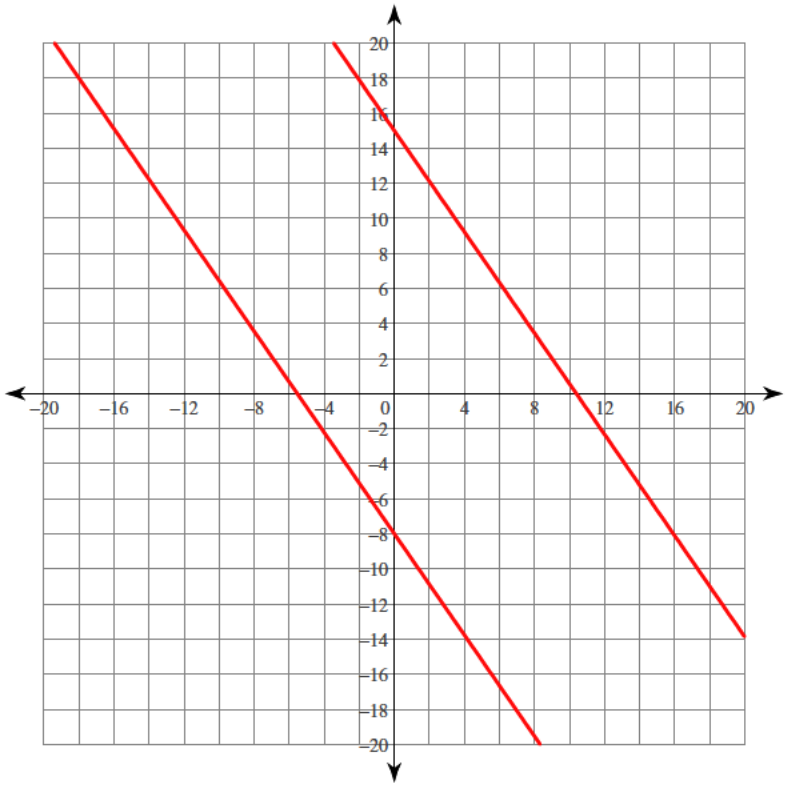
$x = -18$



(–18, –14)

123) $y = -\frac{13}{9}x - 8$

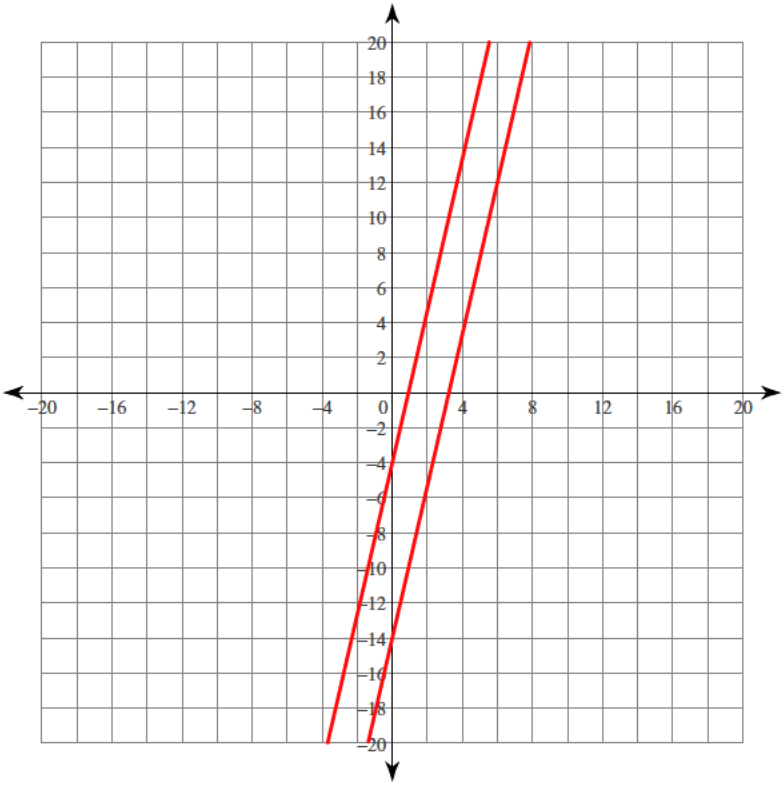
$y = -\frac{13}{9}x + 15$



No solution

124) $y = \frac{13}{3}x - 4$

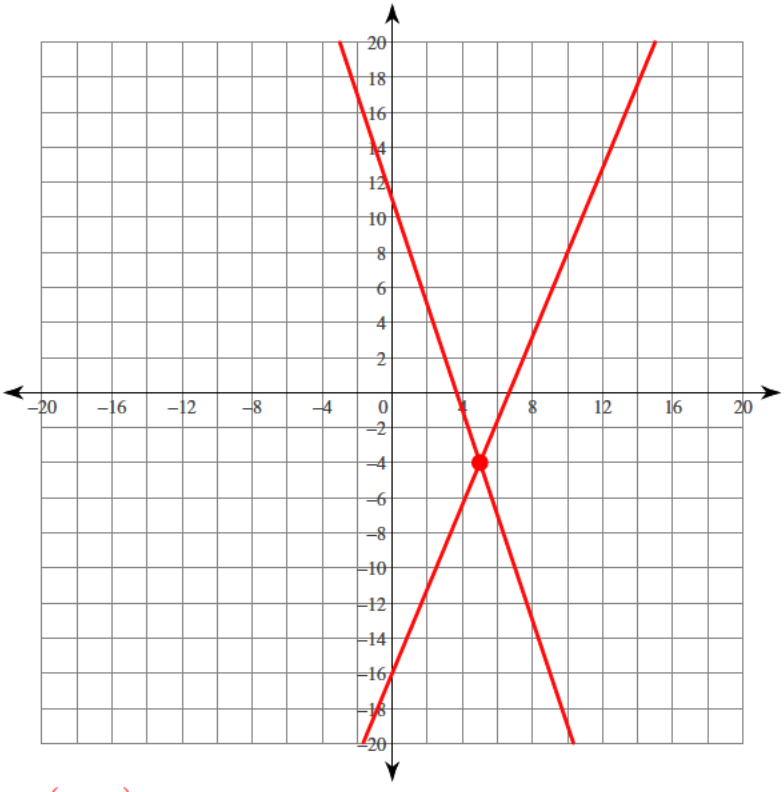
$y = \frac{13}{3}x - 14$



No solution

125) $y = \frac{12}{5}x - 16$

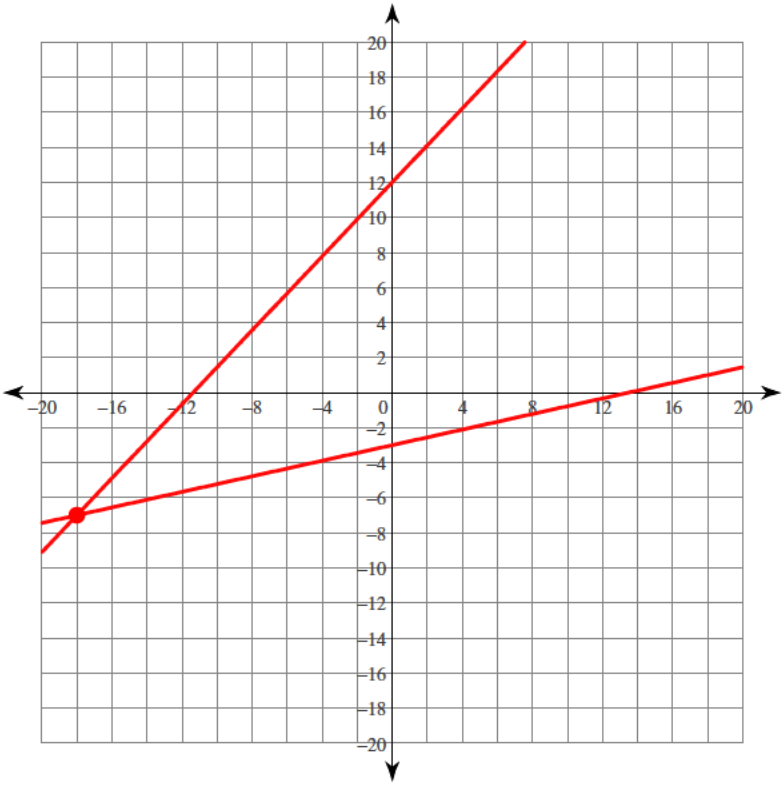
$y = -3x + 11$



(5, –4)

126) $y = \frac{19}{18}x + 12$

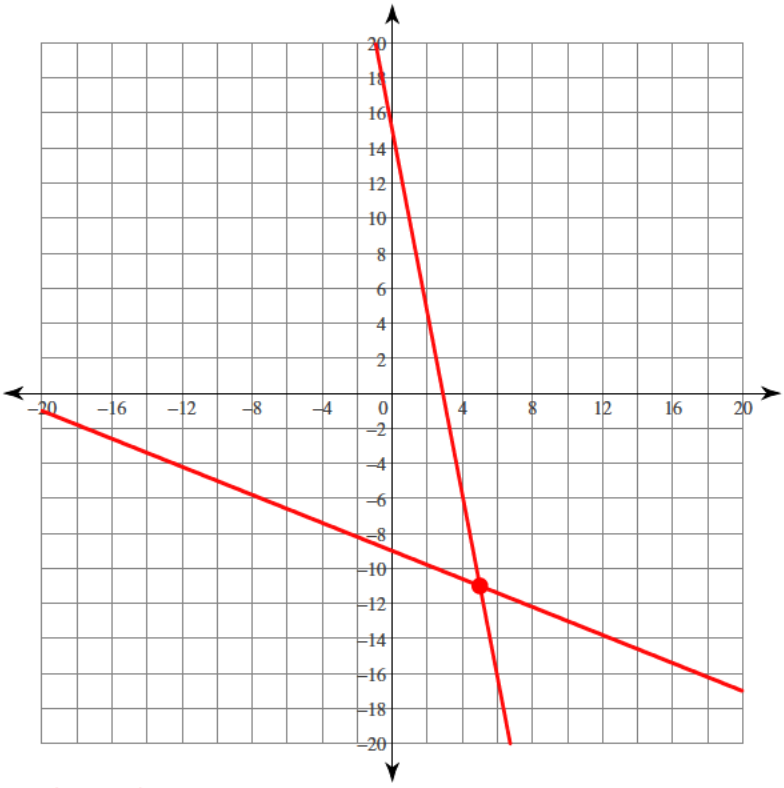
$y = \frac{2}{9}x - 3$



(–18, –7)

127) $y = -\frac{26}{5}x + 15$

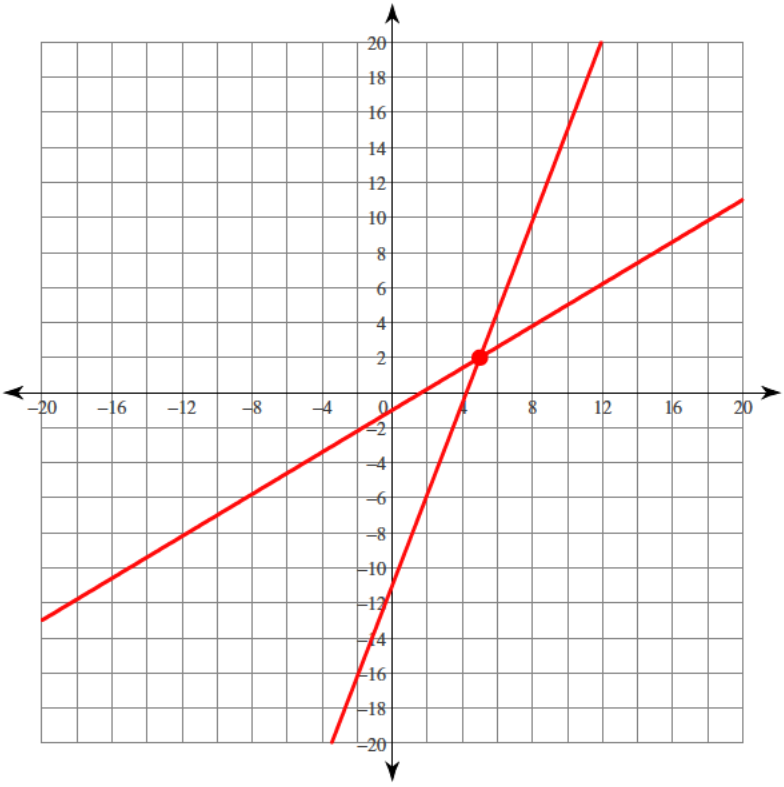
$y = -\frac{2}{5}x - 9$



(5, –11)

128) $y = \frac{13}{5}x - 11$

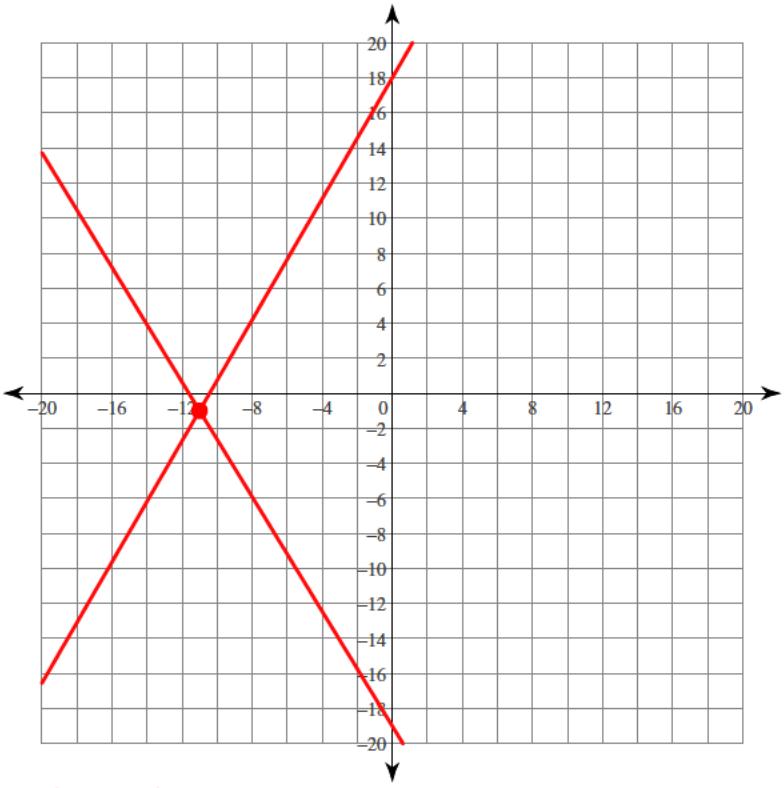
$y = \frac{3}{5}x - 1$



(5, 2)

129) $y = -\frac{18}{11}x - 19$

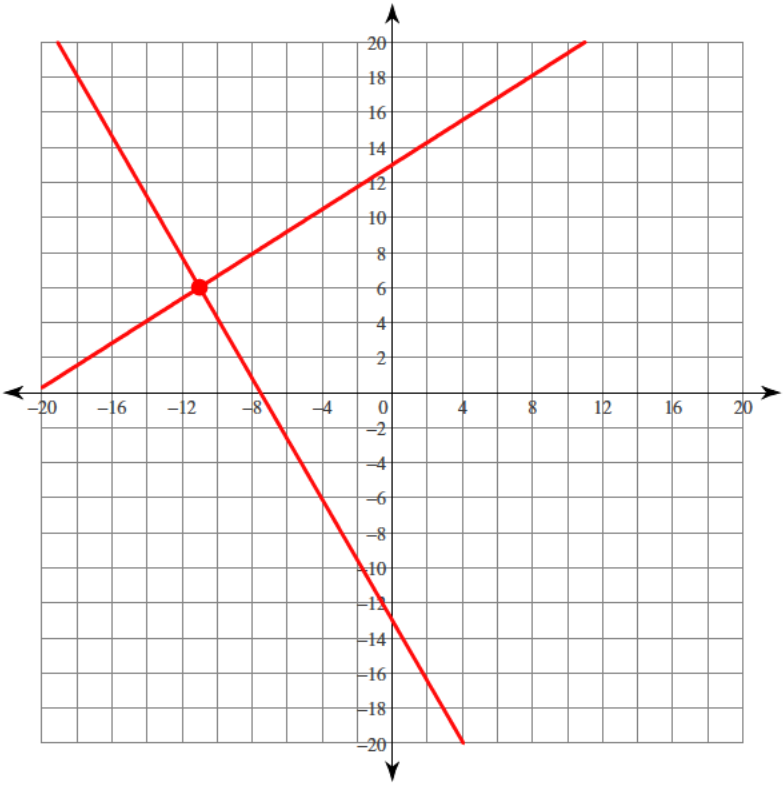
$y = \frac{19}{11}x + 18$



(−11, −1)

130) $y = -\frac{19}{11}x - 13$

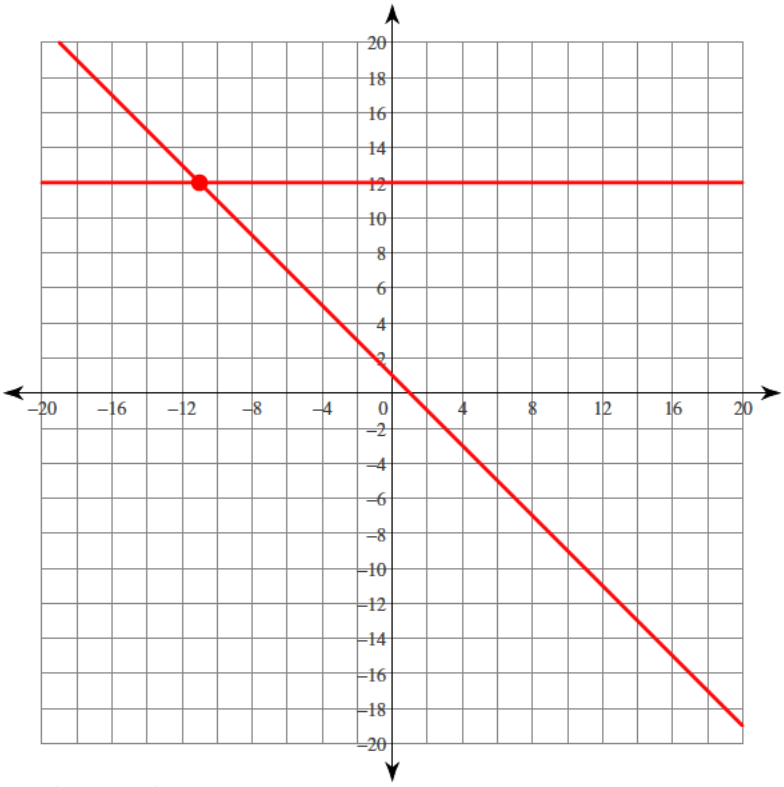
$y = \frac{7}{11}x + 13$



(–11, 6)

131) $y = 12$

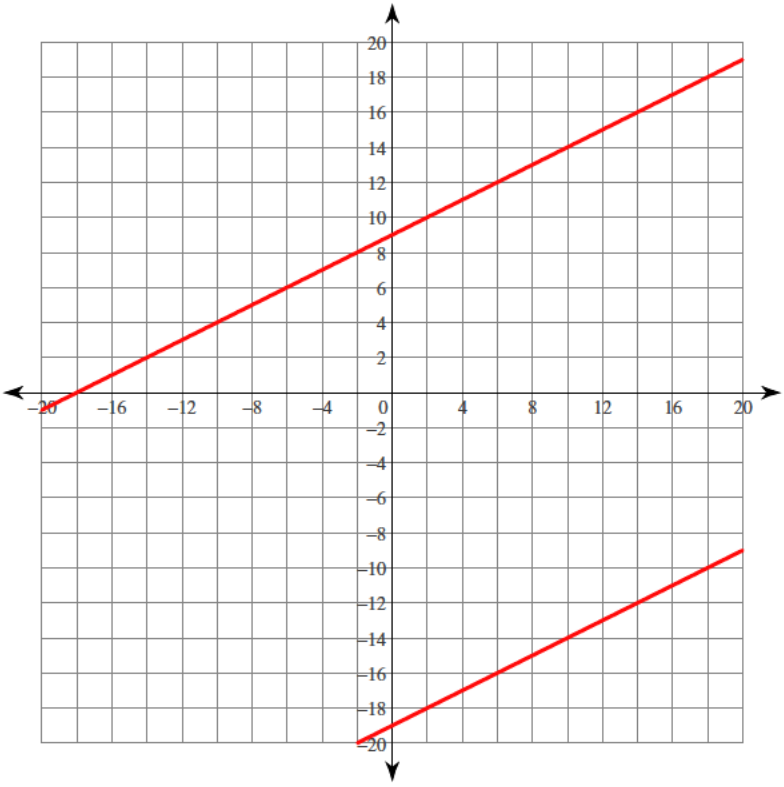
$y = -x + 1$



(–11, 12)

132) $y = \frac{1}{2}x + 9$

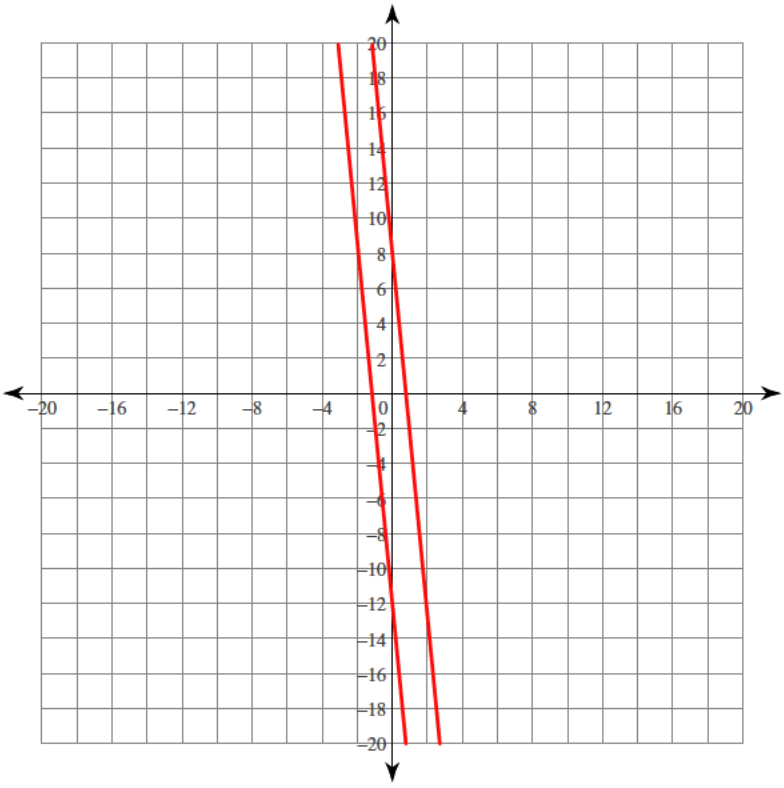
$y = \frac{1}{2}x - 19$



No solution

133) $y = -\frac{31}{3}x - 12$

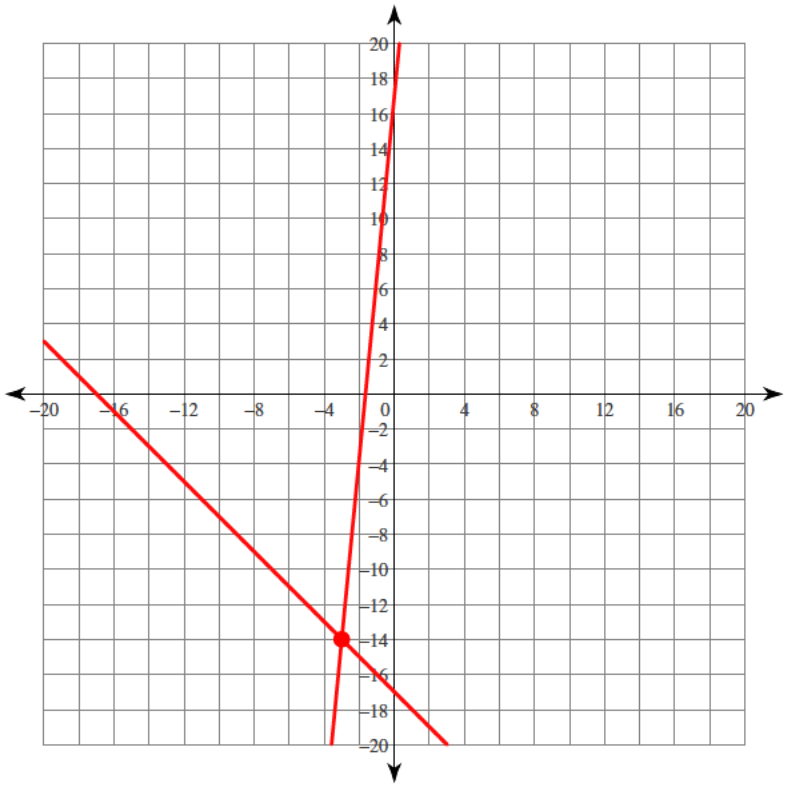
$y = -\frac{31}{3}x + 8$



No solution

134) $y = \frac{31}{3}x + 17$

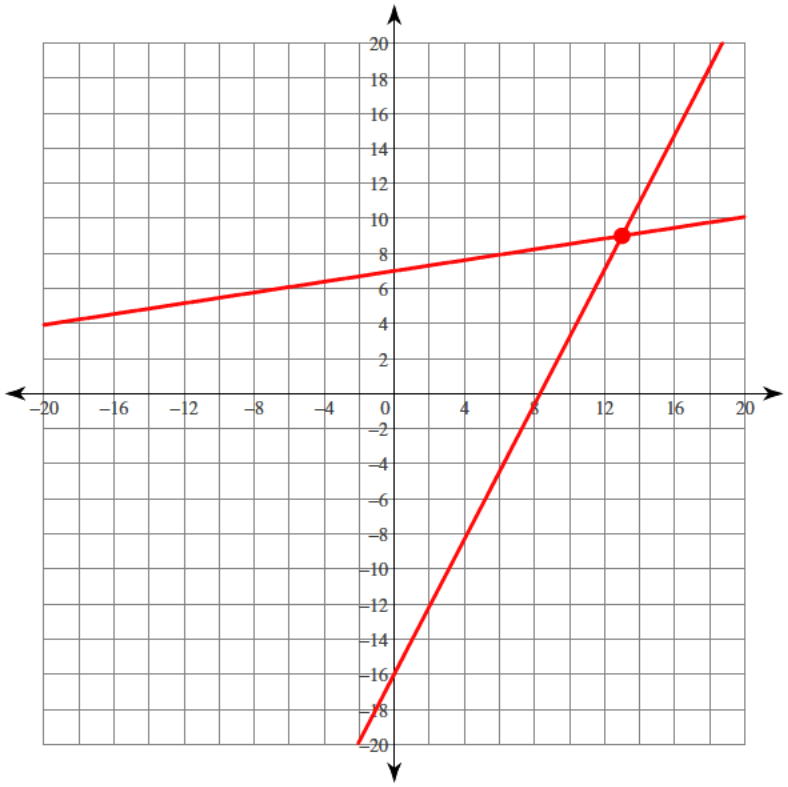
$y = -x - 17$



(–3, –14)

135) $y = \frac{2}{13}x + 7$

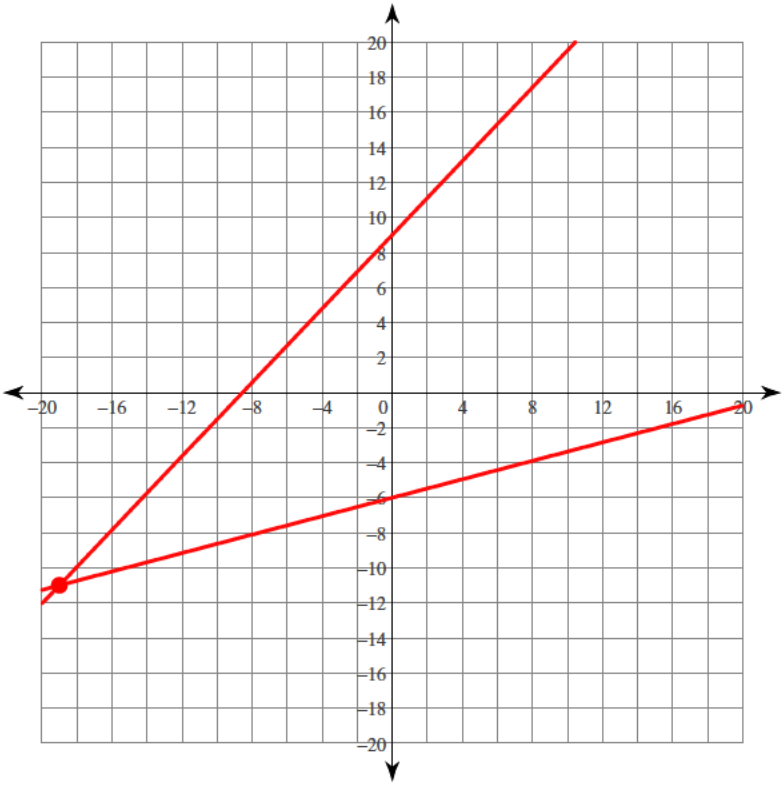
$y = \frac{25}{13}x - 16$



(13, 9)

136) $y = \frac{20}{19}x + 9$

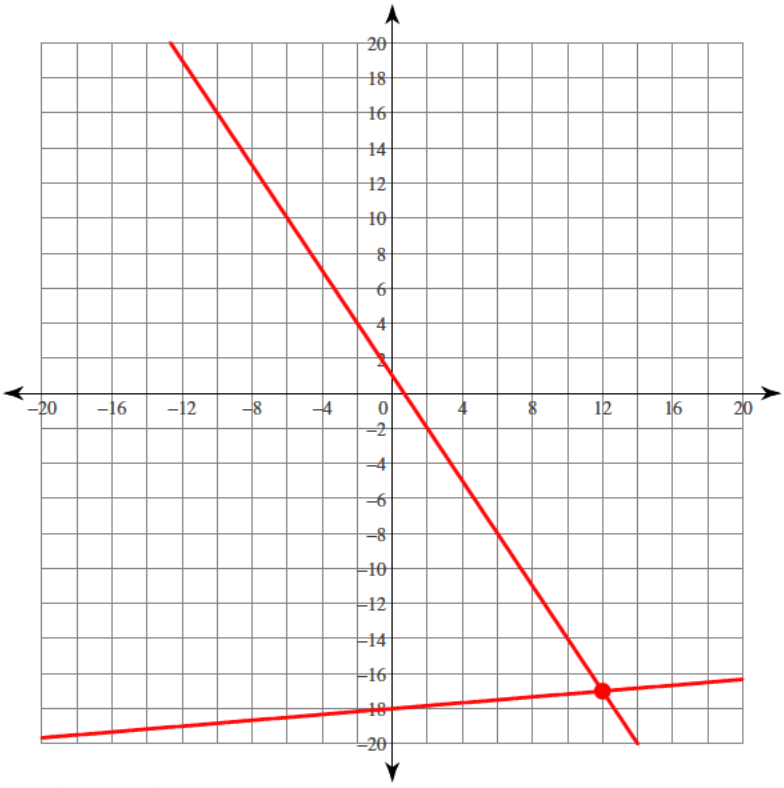
$y = \frac{5}{19}x - 6$



(–19, –11)

137) $y = -\frac{3}{2}x + 1$

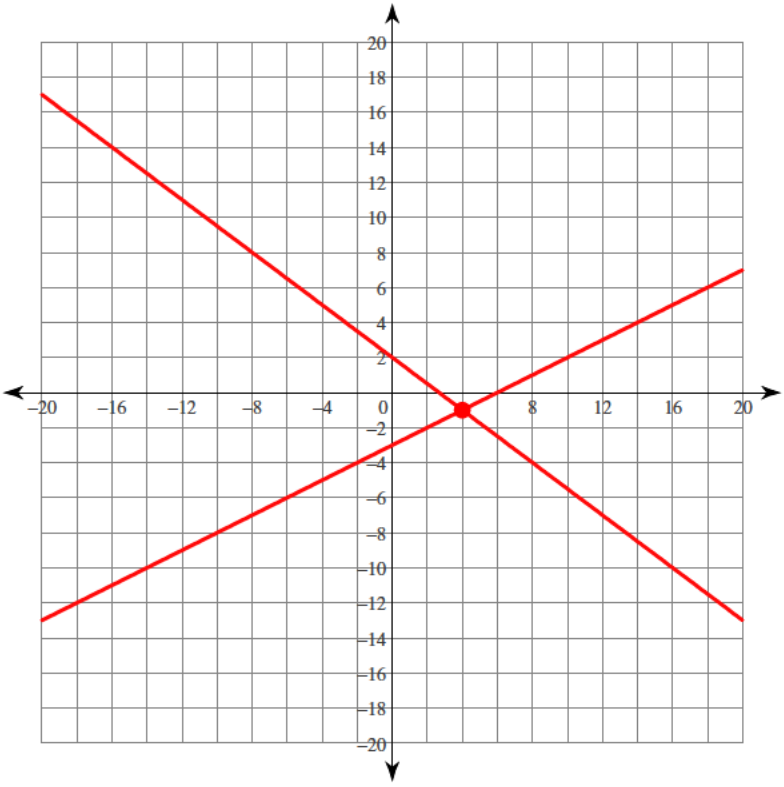
$y = \frac{1}{12}x - 18$



(12, –17)

138) $y = -\frac{3}{4}x + 2$

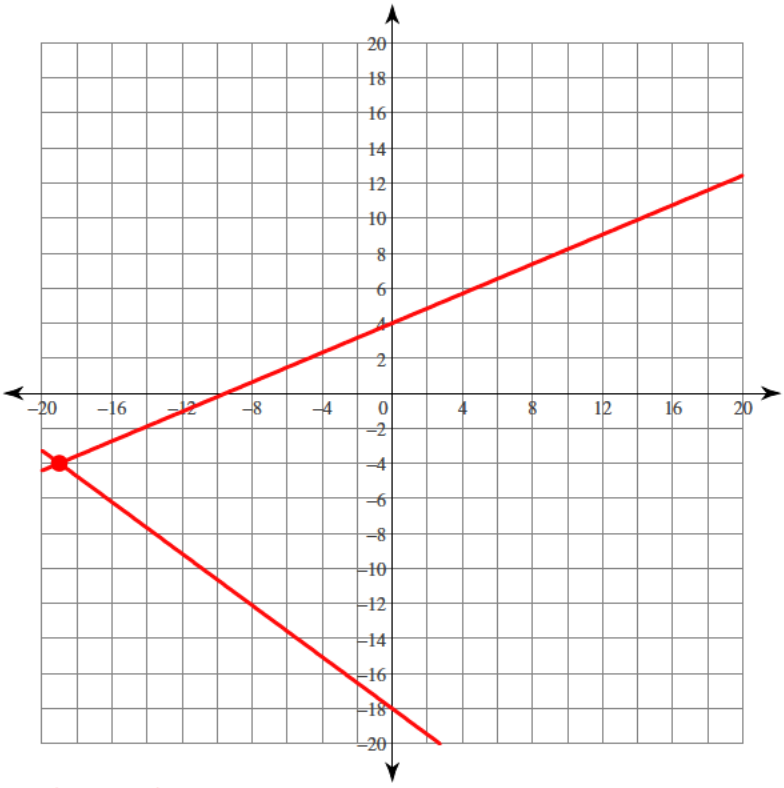
$y = \frac{1}{2}x - 3$



(4, –1)

139) $y = \frac{8}{19}x + 4$

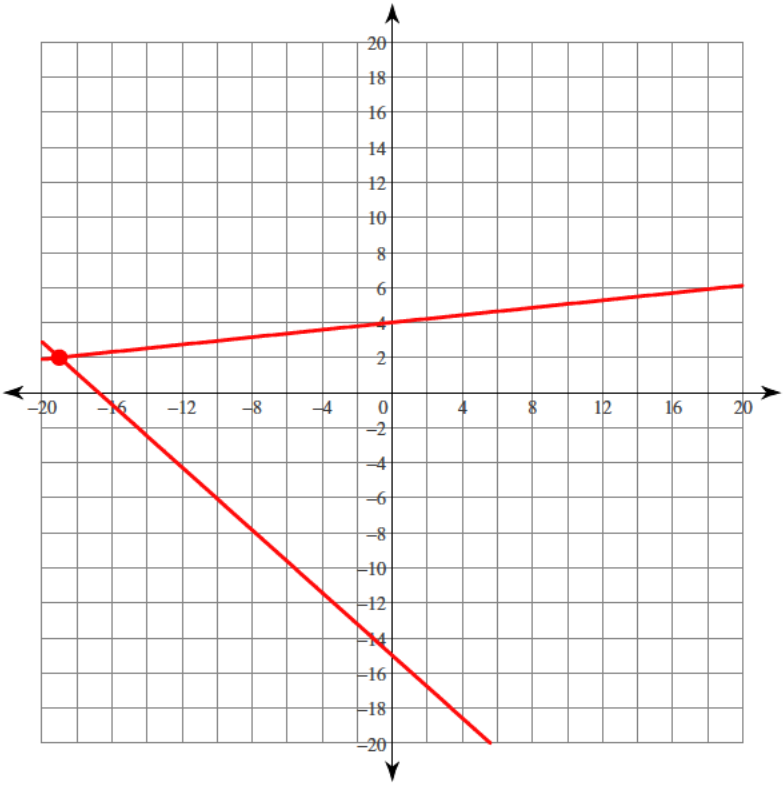
$y = -\frac{14}{19}x - 18$



(–19, –4)

140) $y = -\frac{17}{19}x - 15$

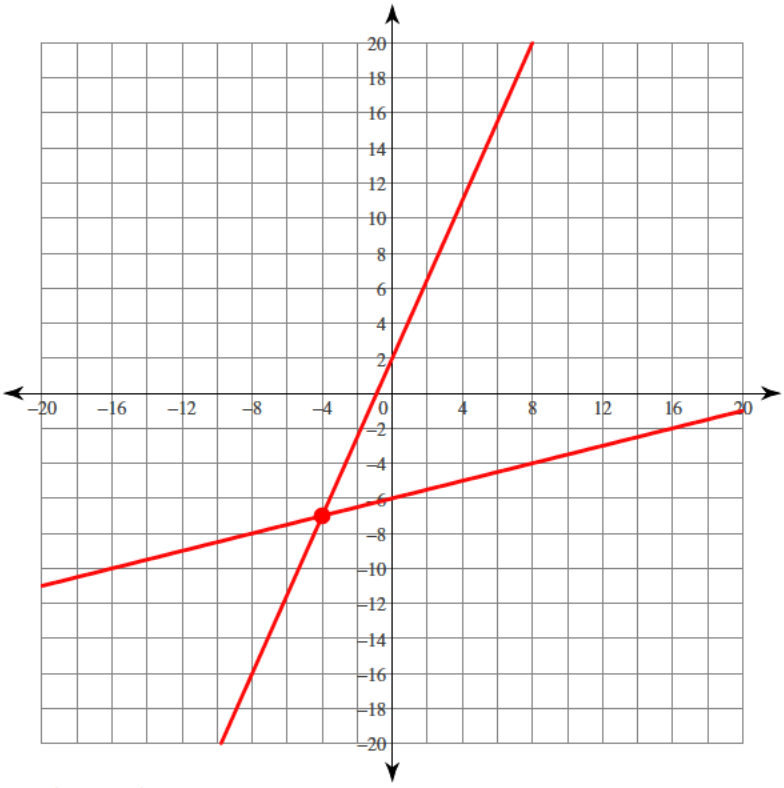
$y = \frac{2}{19}x + 4$



(–19, 2)

141) $y = \frac{9}{4}x + 2$

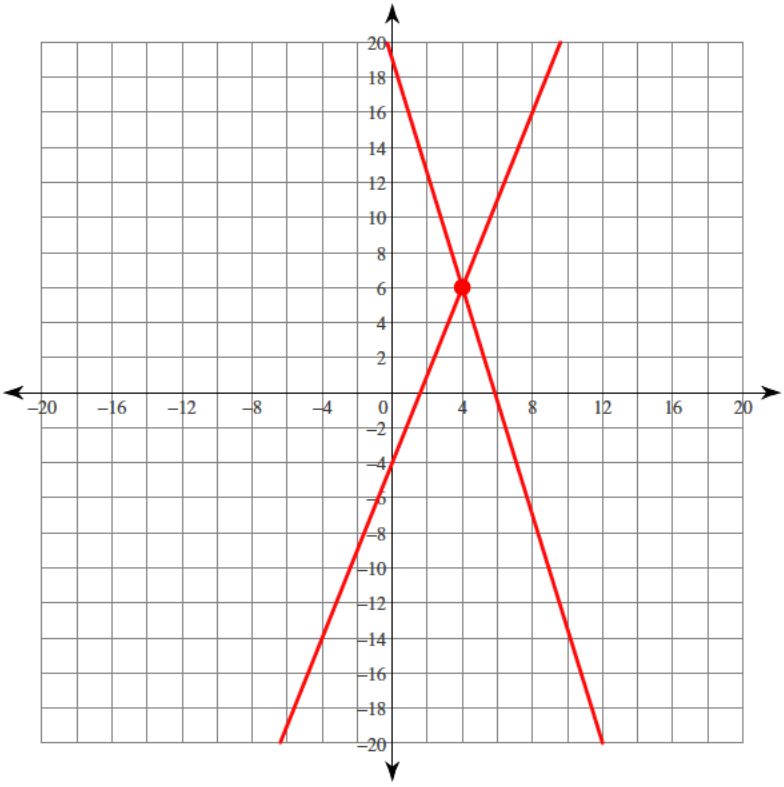
$y = \frac{1}{4}x - 6$



(–4, –7)

142) $y = \frac{5}{2}x - 4$

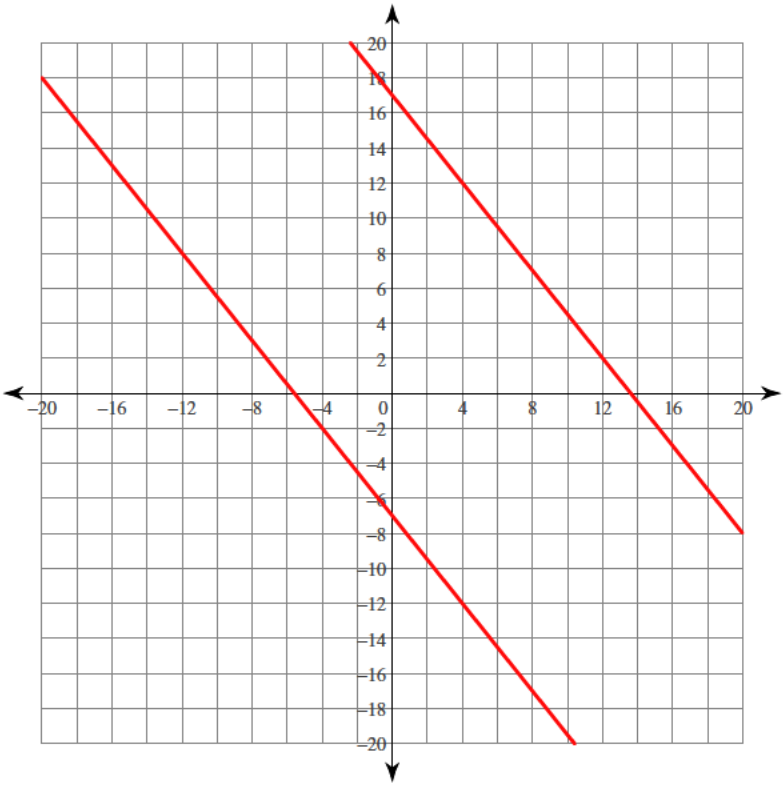
$y = -\frac{13}{4}x + 19$



(4, 6)

143) $y = -\frac{5}{4}x + 17$

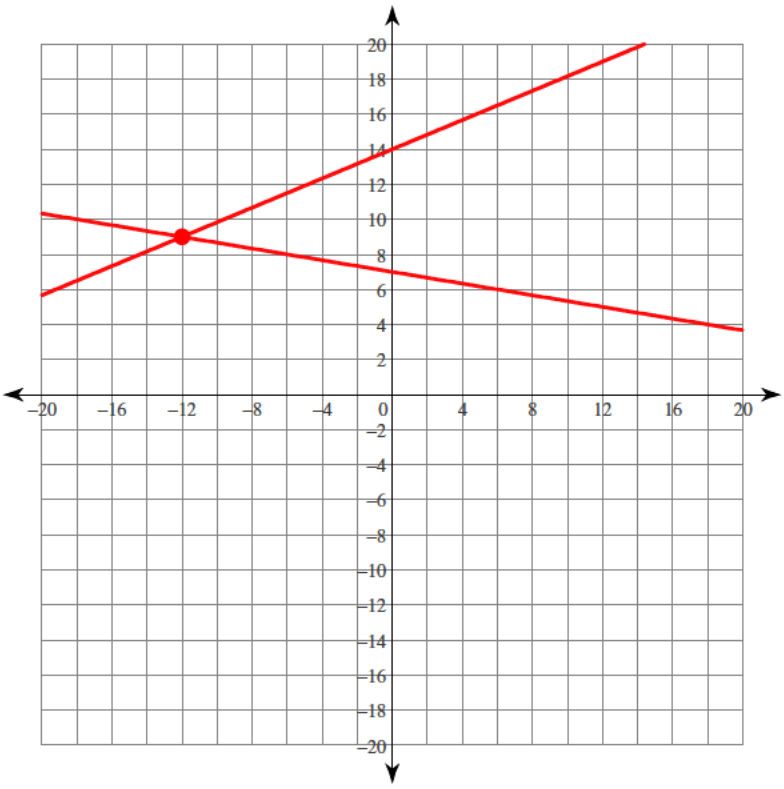
$y = -\frac{5}{4}x - 7$



No solution

144) $y = \frac{5}{12}x + 14$

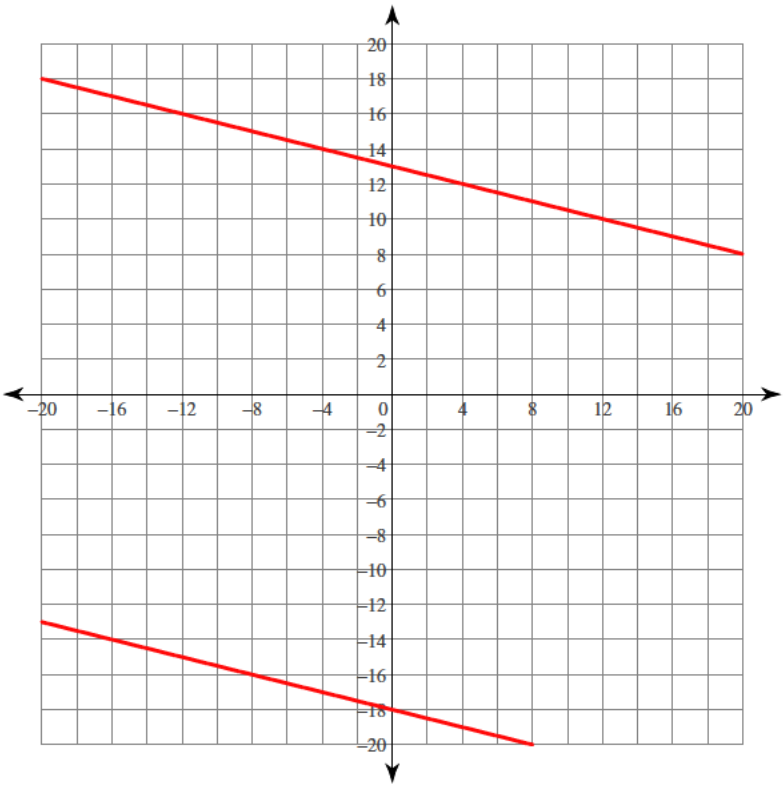
$y = -\frac{1}{6}x + 7$



(–12, 9)

145) $y = -\frac{1}{4}x + 13$

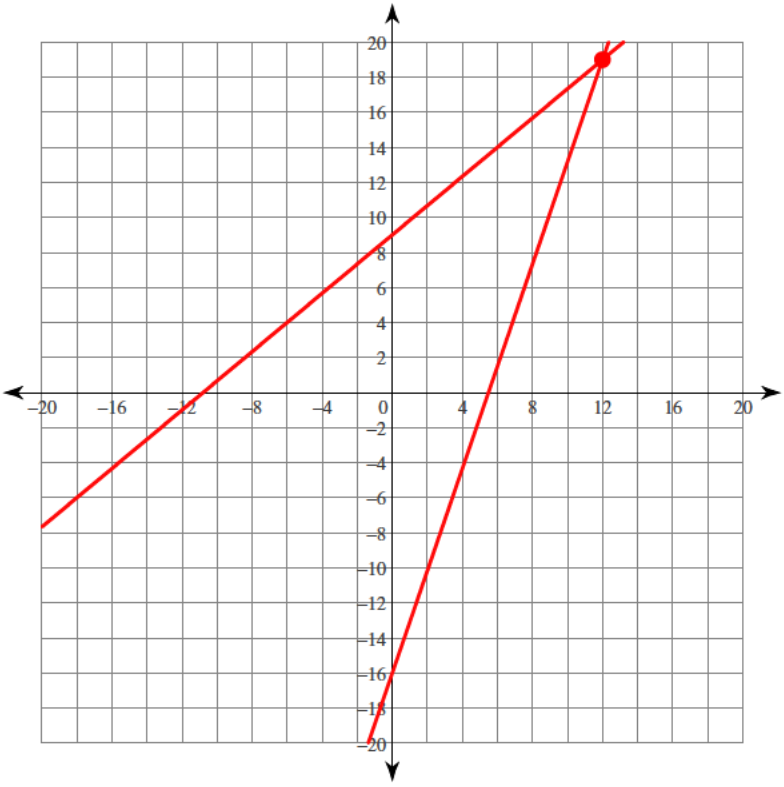
$y = -\frac{1}{4}x - 18$



No solution

146) $y = \frac{35}{12}x - 16$

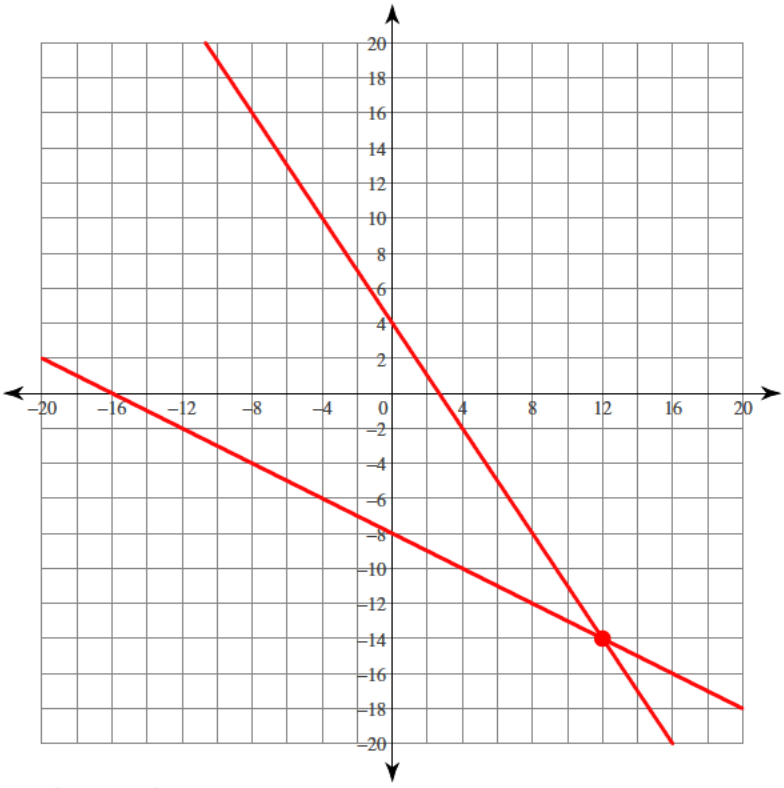
$y = \frac{5}{6}x + 9$



(12, 19)

147) $y = -\frac{1}{2}x - 8$

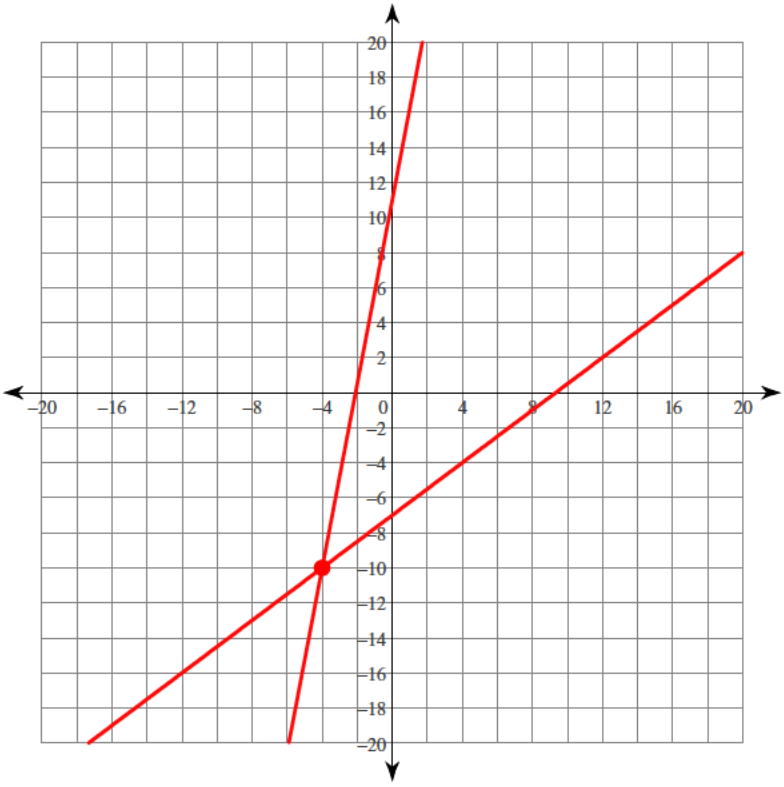
$y = -\frac{3}{2}x + 4$



(12, –14)

148) $y = \frac{3}{4}x - 7$

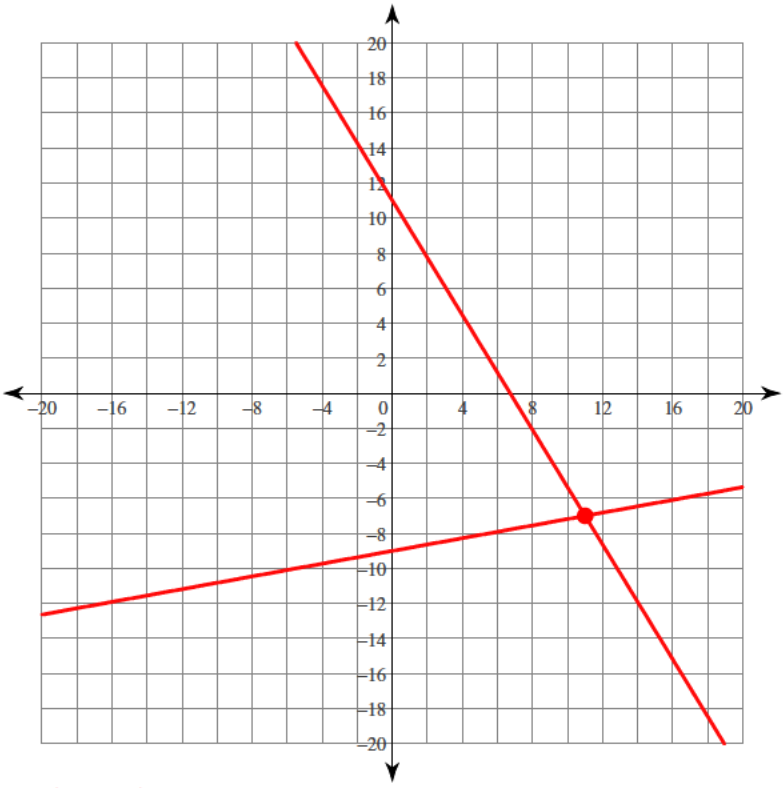
$y = \frac{21}{4}x + 11$



(–4, –10)

149) $y = -\frac{18}{11}x + 11$

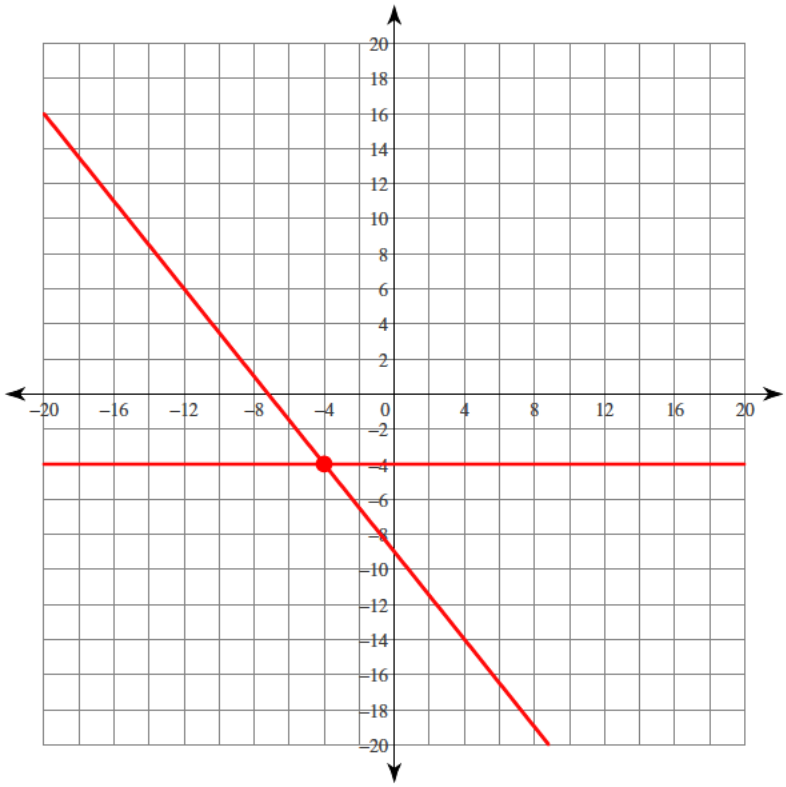
$y = \frac{2}{11}x - 9$



(11, –7)

150) $y = -\frac{5}{4}x - 9$

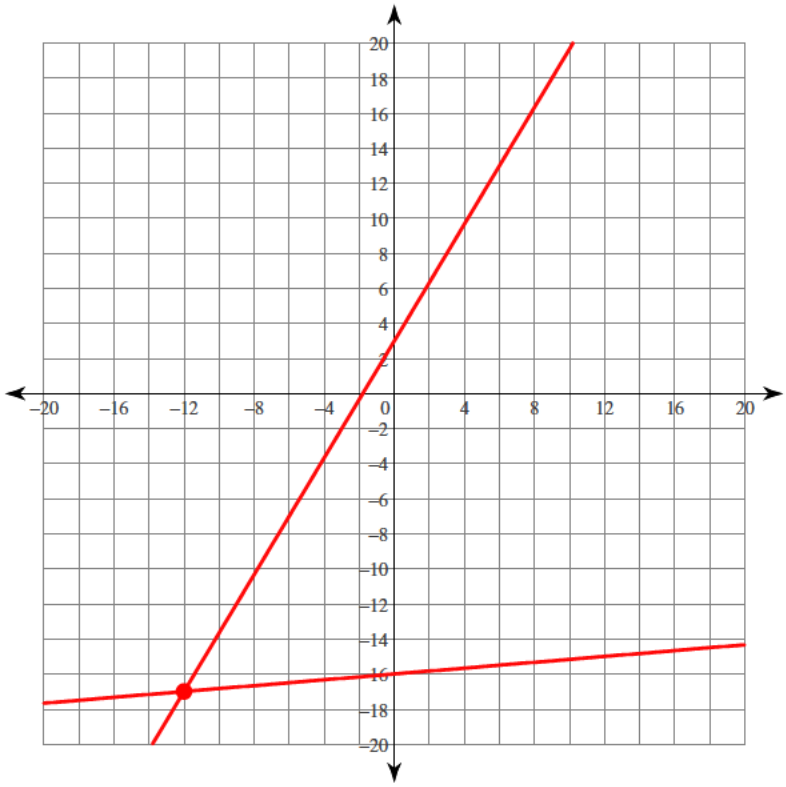
$y = -4$



(–4, –4)

151) $y = \frac{5}{3}x + 3$

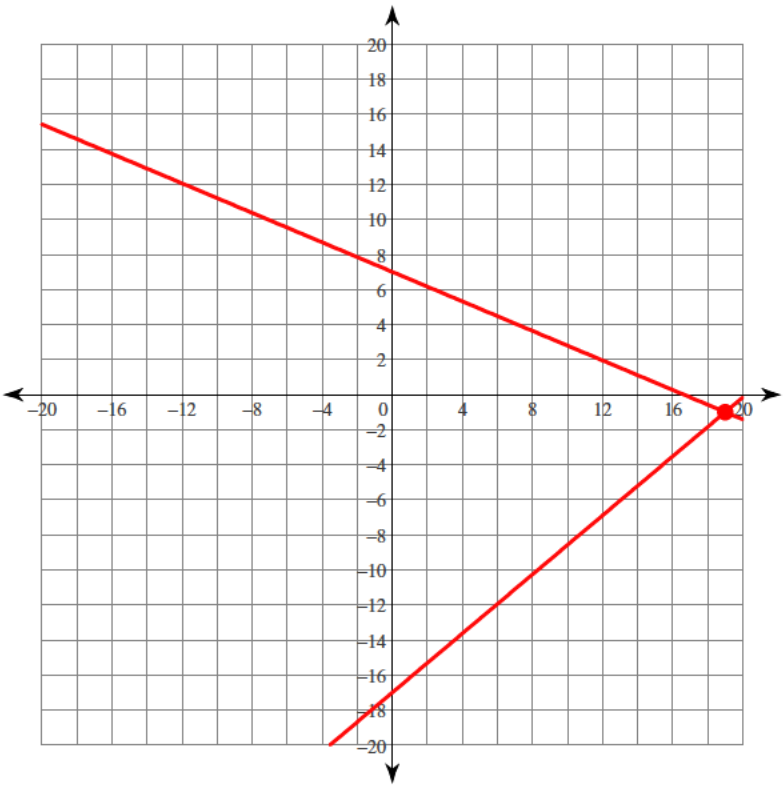
$y = \frac{1}{12}x - 16$



(–12, –17)

152) $y = \frac{16}{19}x - 17$

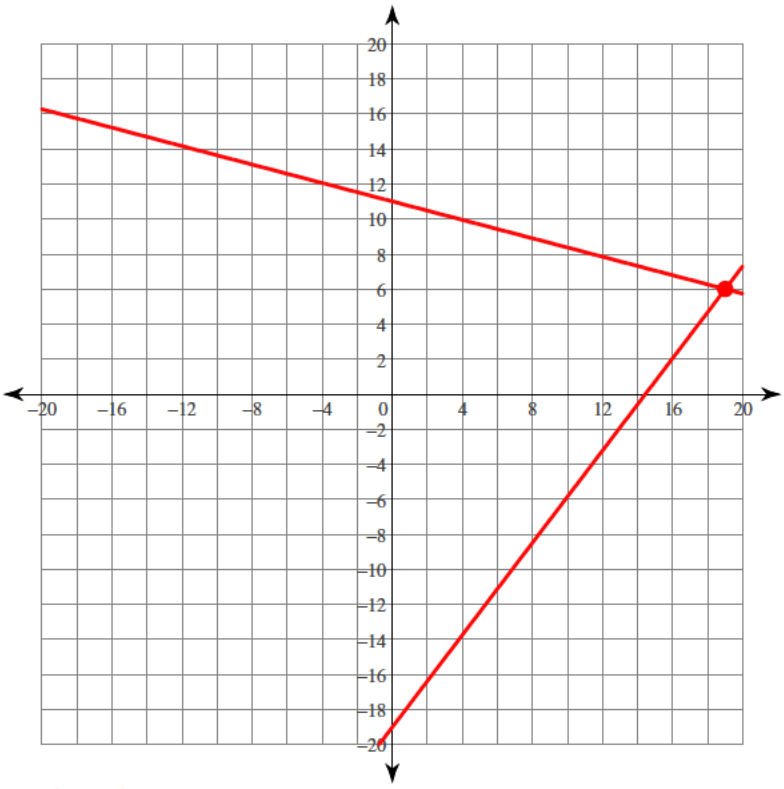
$y = -\frac{8}{19}x + 7$



(19, –1)

153) $y = \frac{25}{19}x - 19$

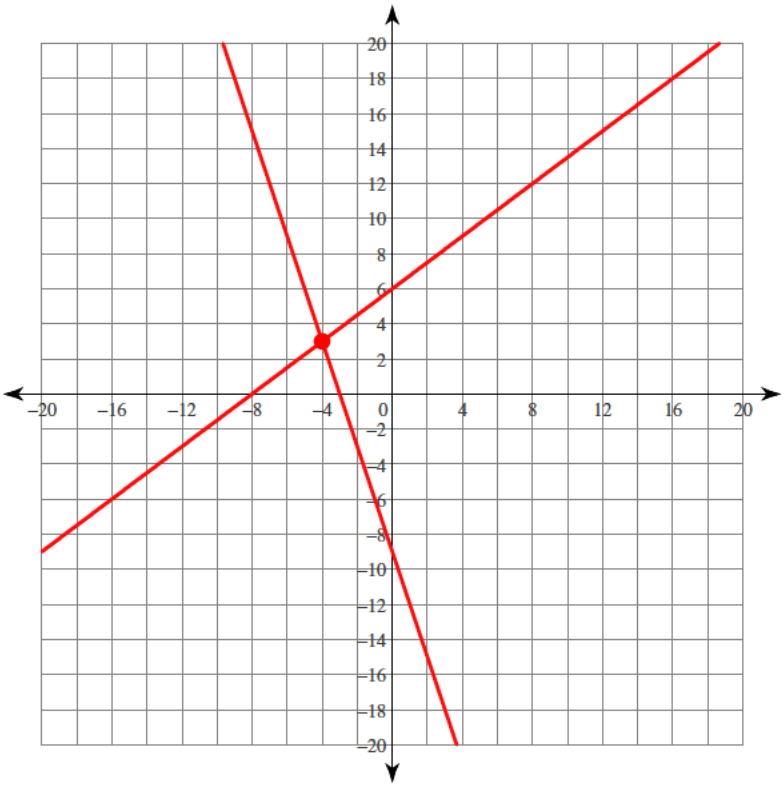
$y = -\frac{5}{19}x + 11$



(19, 6)

154) $y = \frac{3}{4}x + 6$

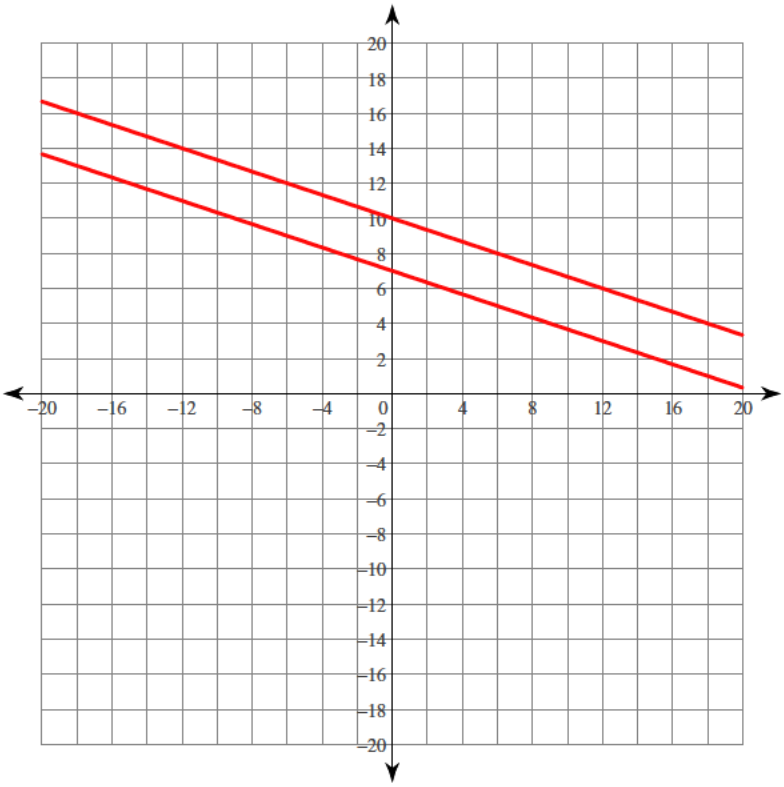
$y = -3x - 9$



(–4, 3)

155) $y = -\frac{1}{3}x + 10$

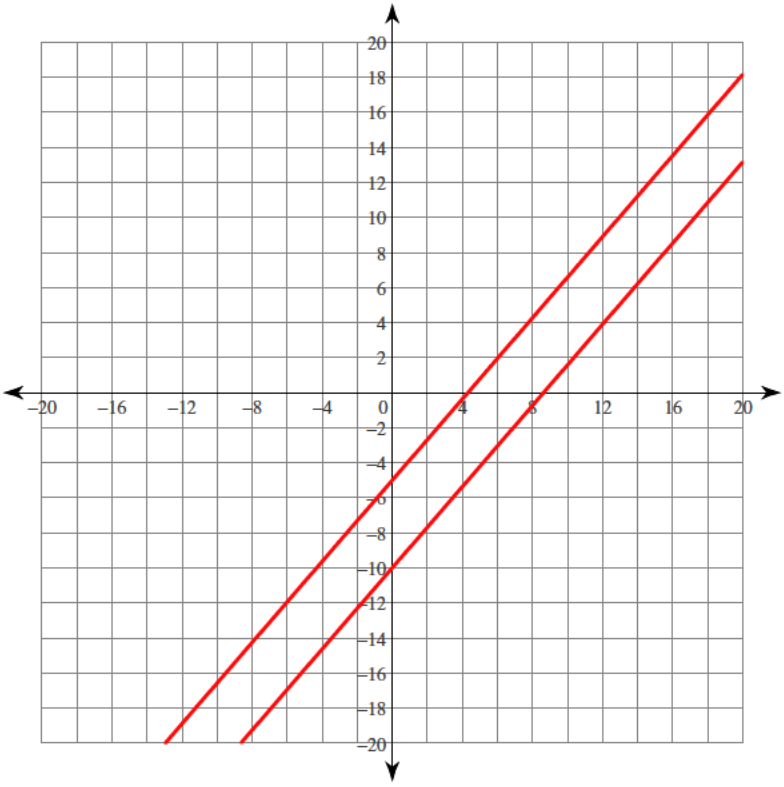
$y = -\frac{1}{3}x + 7$



No solution

156) $y = \frac{22}{19}x - 10$

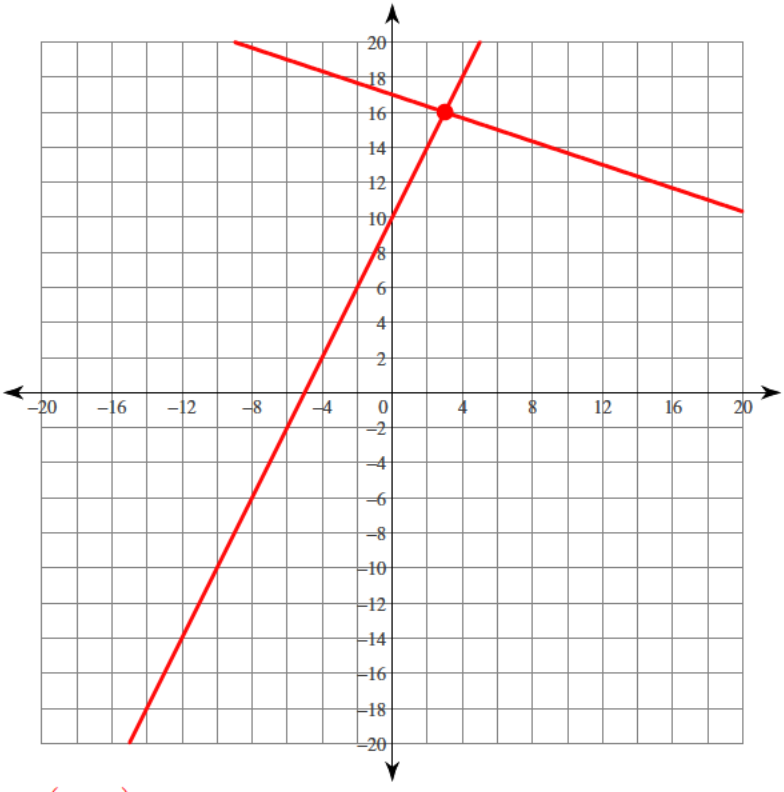
$y = \frac{22}{19}x - 5$



No solution

157) $y = 2x + 10$

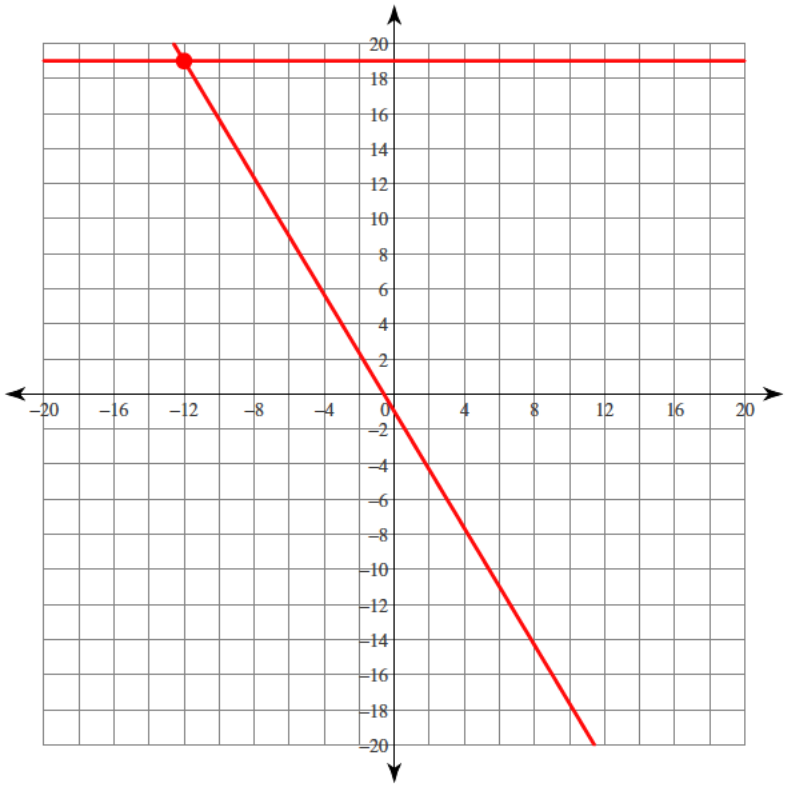
$y = -\frac{1}{3}x + 17$



(3, 16)

158) $y = -\frac{5}{3}x - 1$

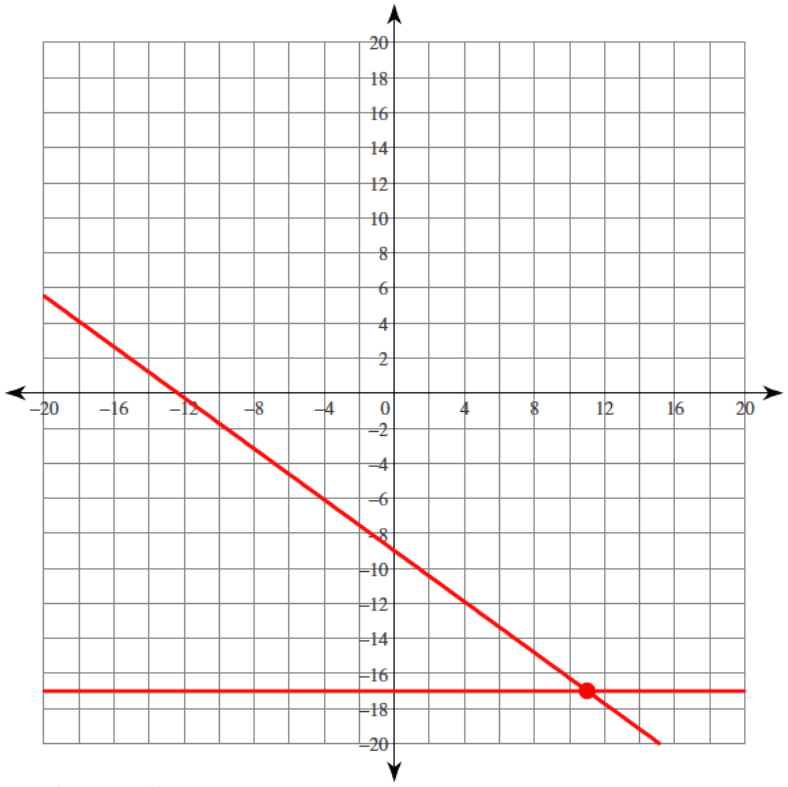
$y = 19$



(–12, 19)

159) $y = -\frac{8}{11}x - 9$

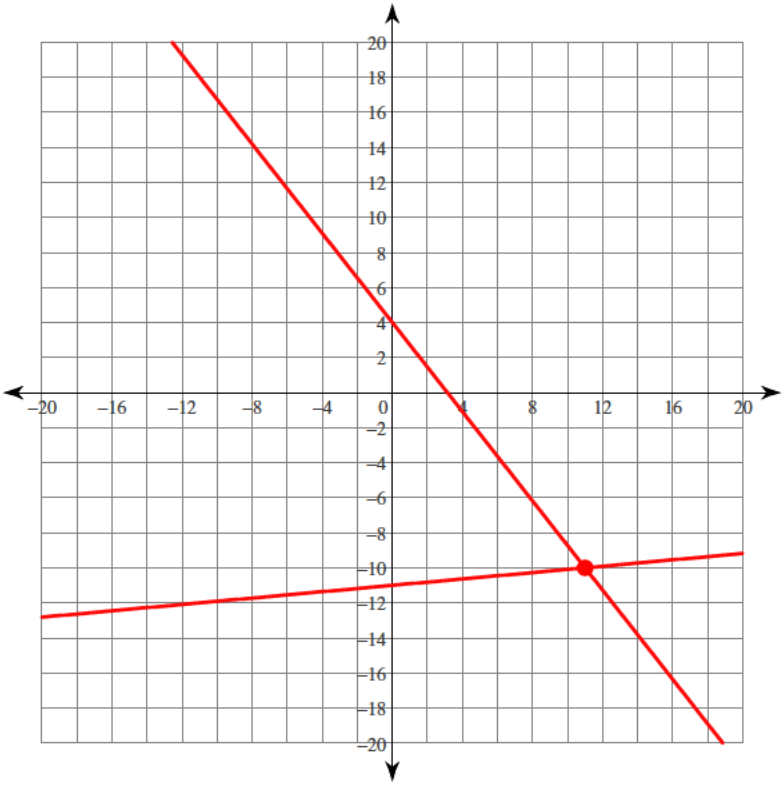
$y = -17$



(11, –17)

160) $y = \frac{1}{11}x - 11$

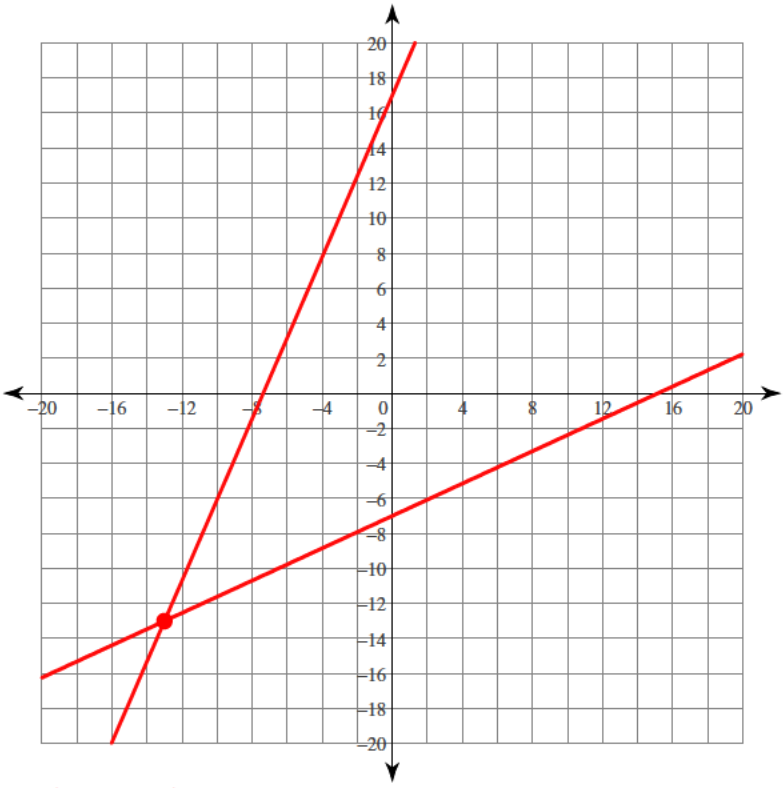
$y = -\frac{14}{11}x + 4$



(11, –10)

161) $y = \frac{30}{13}x + 17$

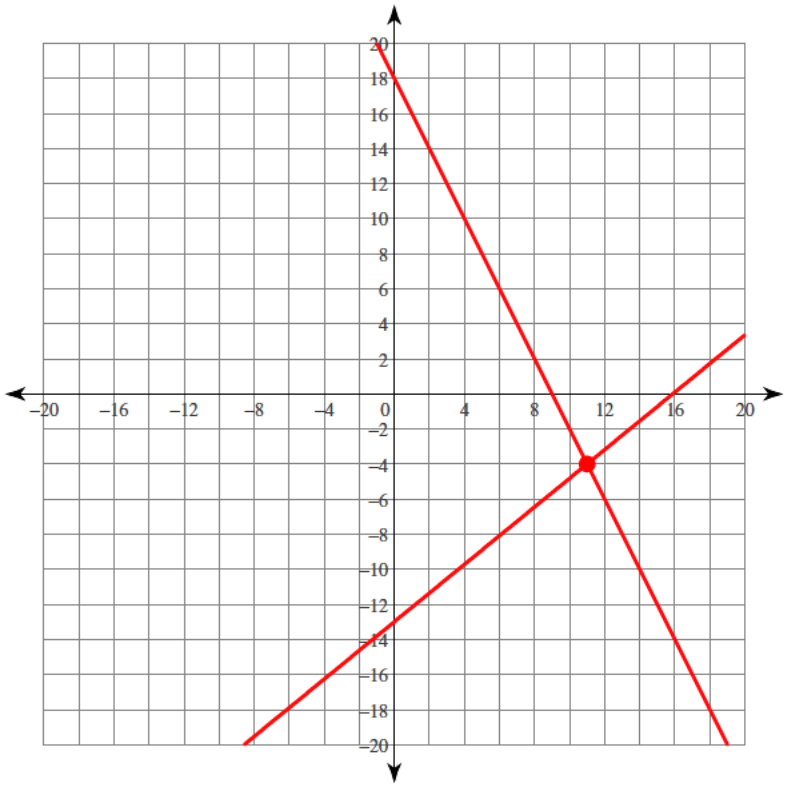
$y = \frac{6}{13}x - 7$



(–13, –13)

162) $y = \frac{9}{11}x - 13$

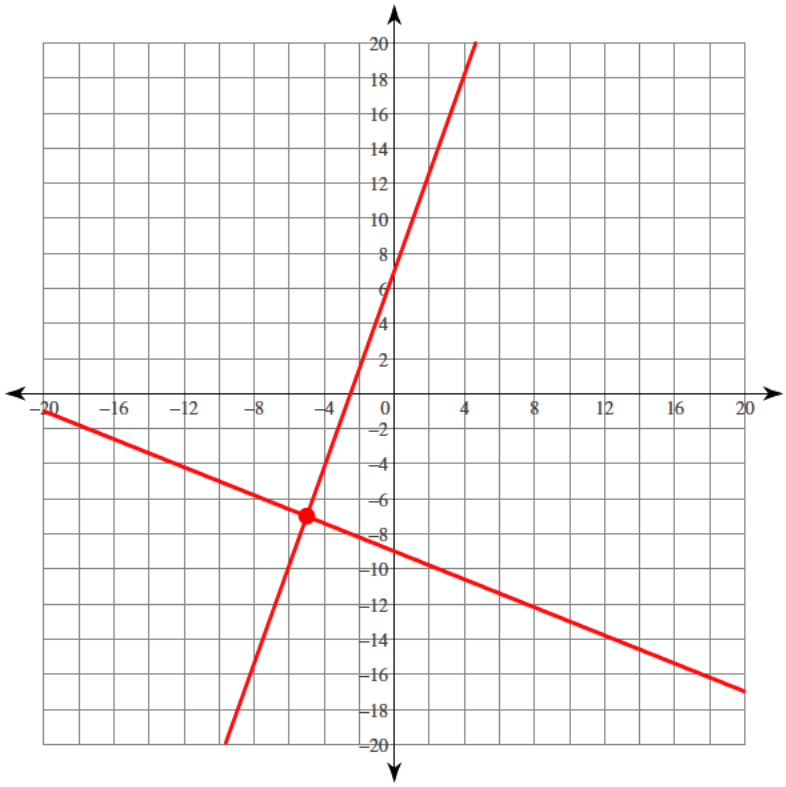
$y = -2x + 18$



(11, –4)

163) $y = \frac{14}{5}x + 7$

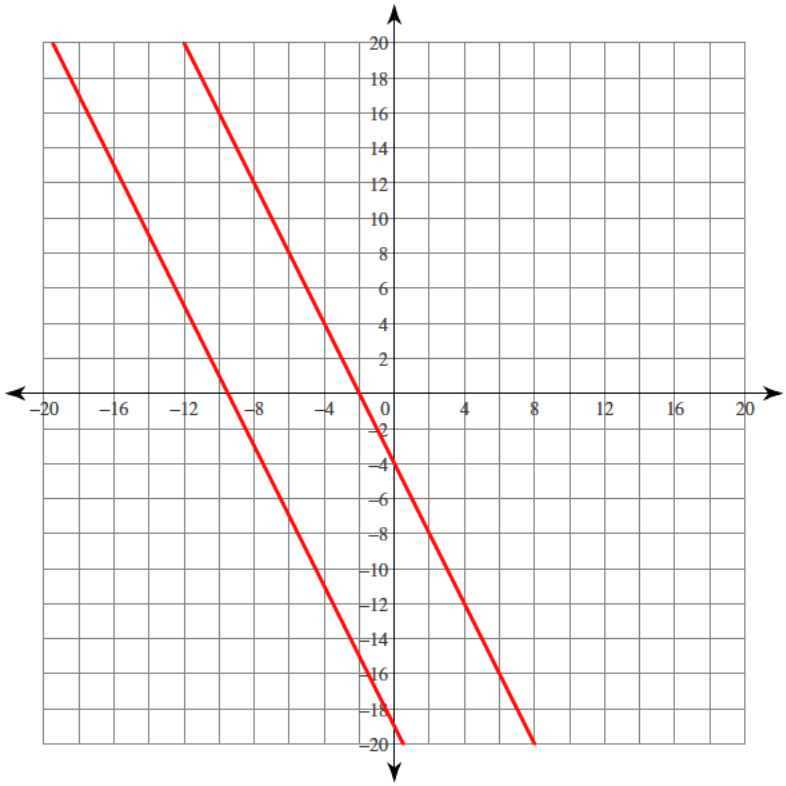
$y = -\frac{2}{5}x - 9$



(–5, –7)

164) $y = -2x - 4$

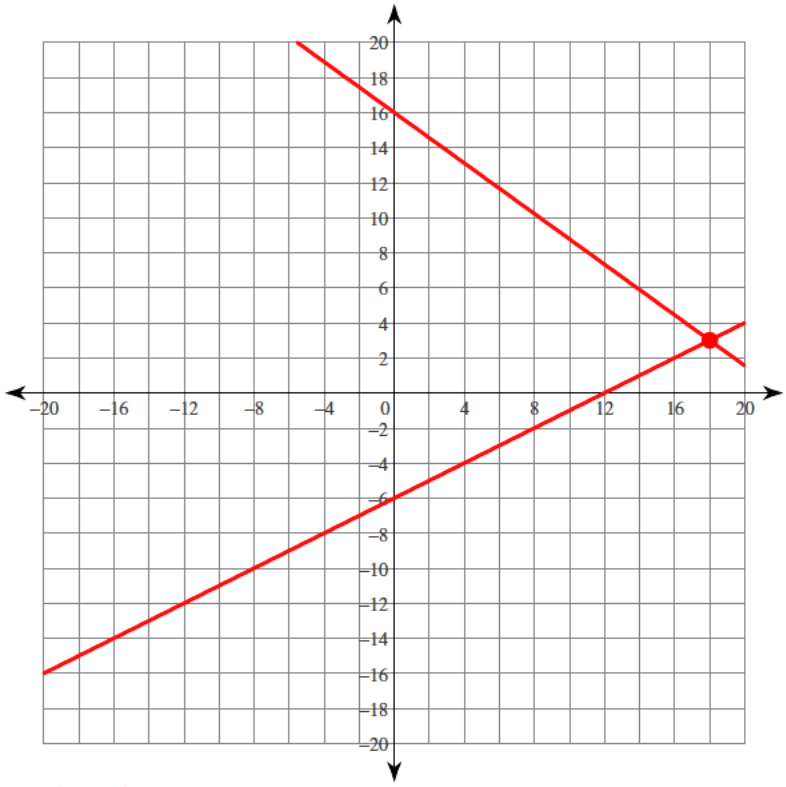
$y = -2x - 19$



No solution

165) $y = -\frac{13}{18}x + 16$

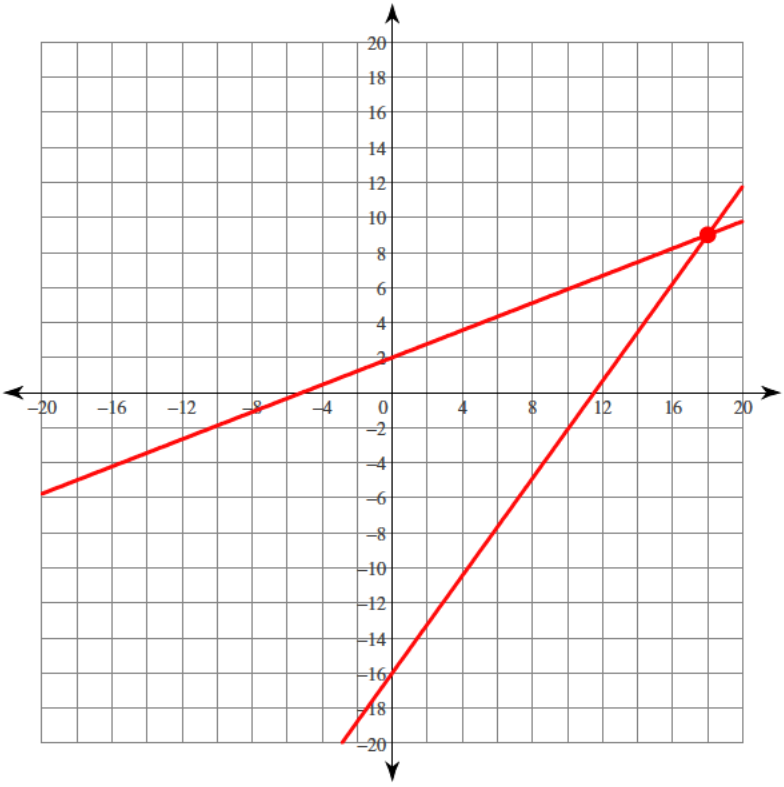
$y = \frac{1}{2}x - 6$



(18, 3)

166) $y = \frac{7}{18}x + 2$

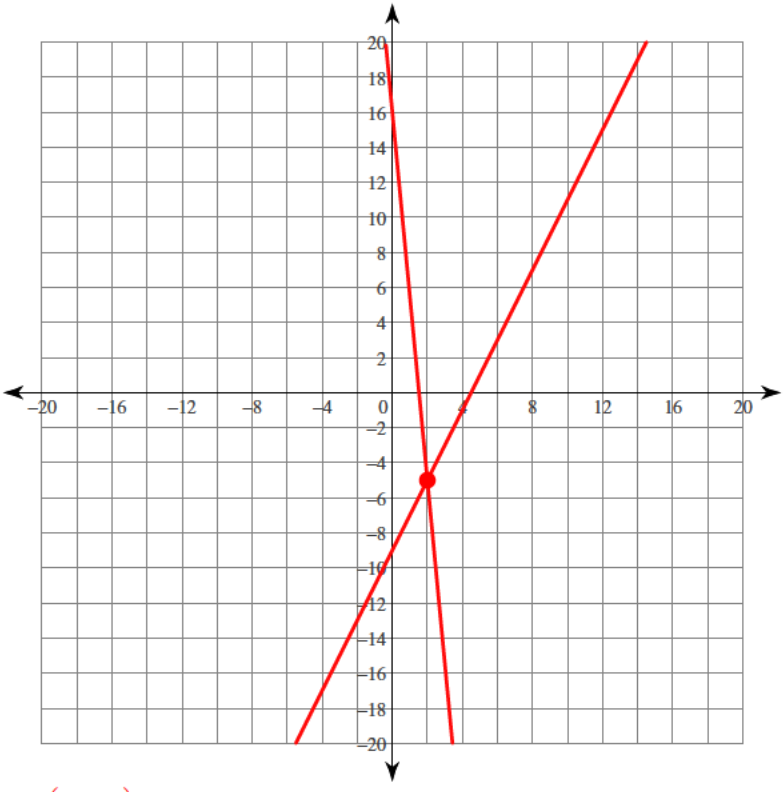
$y = \frac{25}{18}x - 16$



(18, 9)

167) $y = 2x - 9$

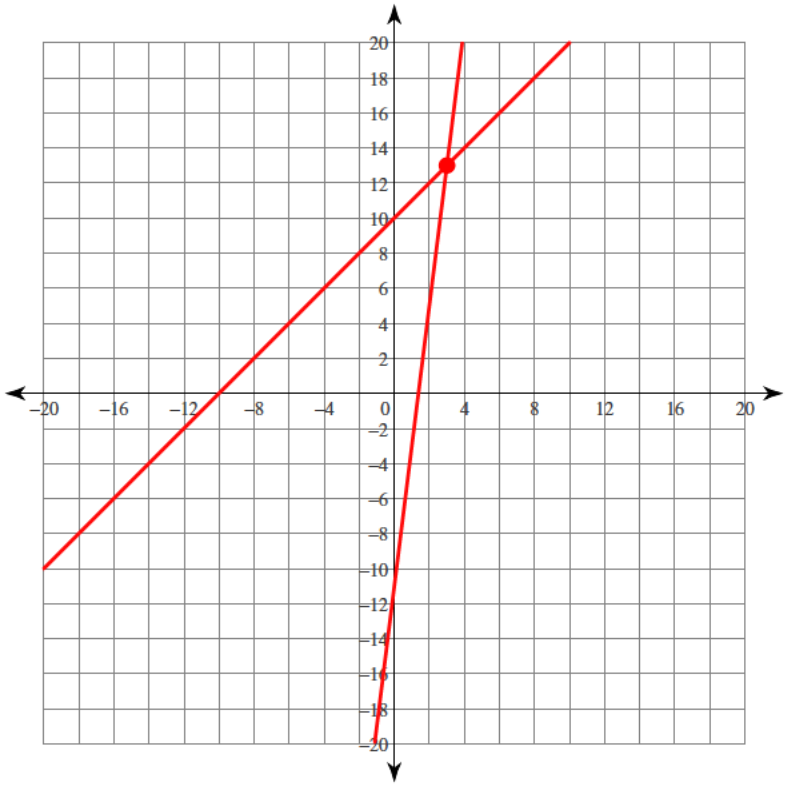
$y = -\frac{21}{2}x + 16$



(2, –5)

168) $y = x + 10$

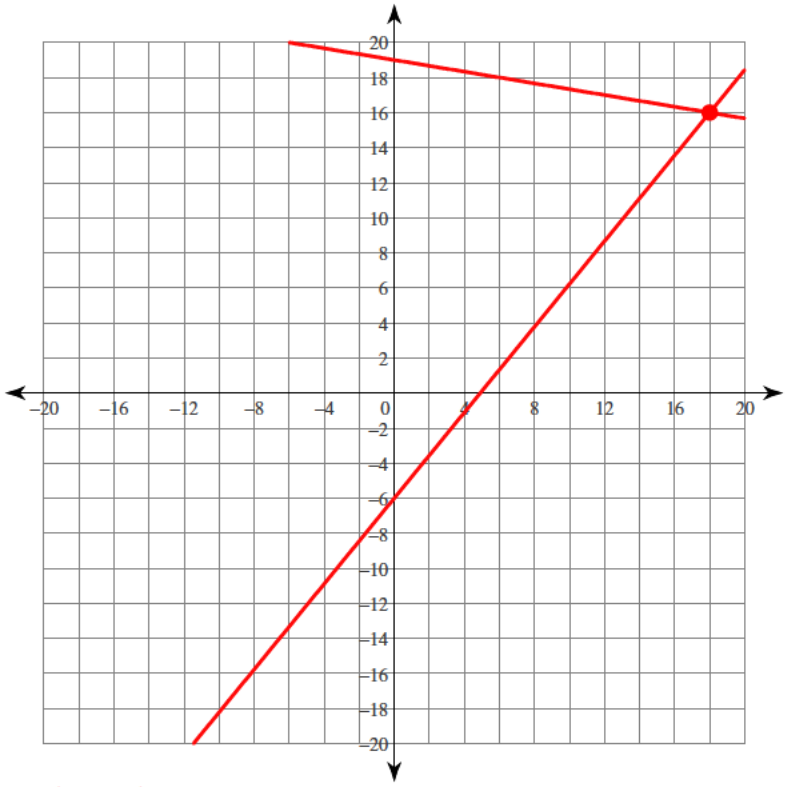
$y = 8x - 11$



(3, 13)

169) $y = -\frac{1}{6}x + 19$

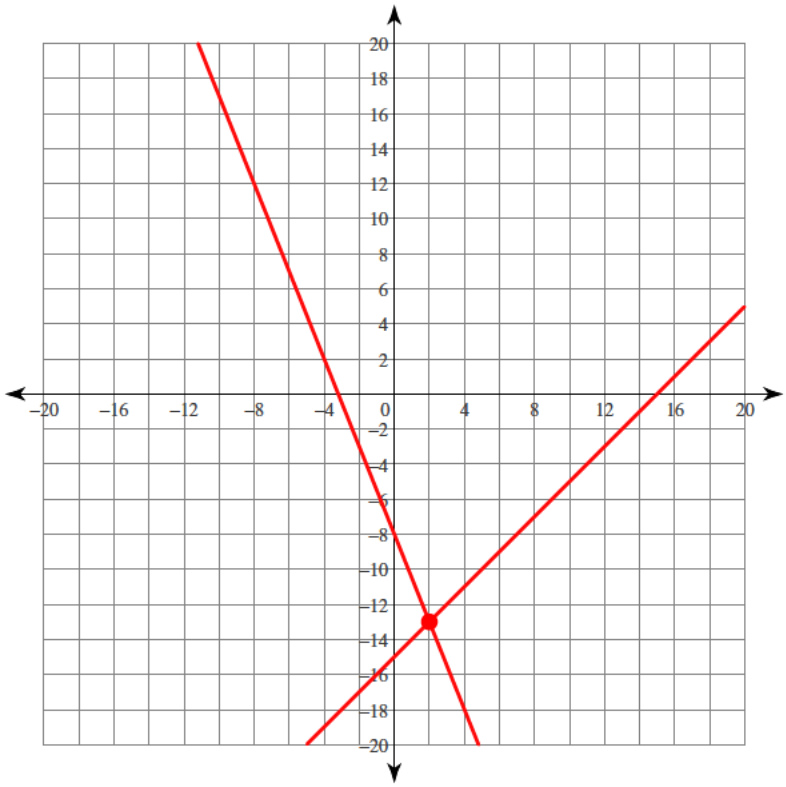
$y = \frac{11}{9}x - 6$



(18, 16)

170) $y = -\frac{5}{2}x - 8$

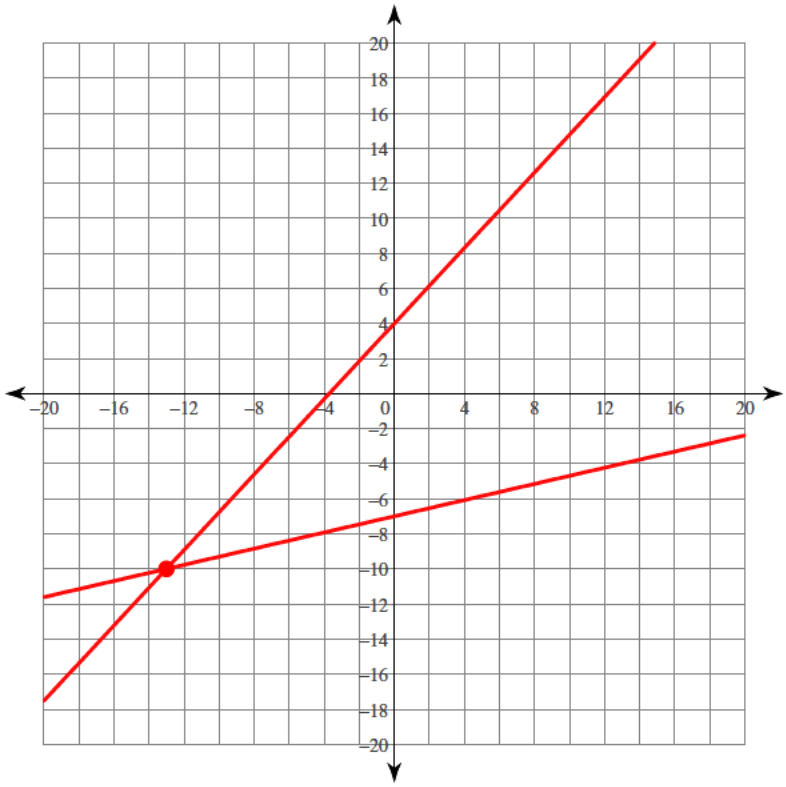
$y = x - 15$



(2, –13)

171) $y = \frac{3}{13}x - 7$

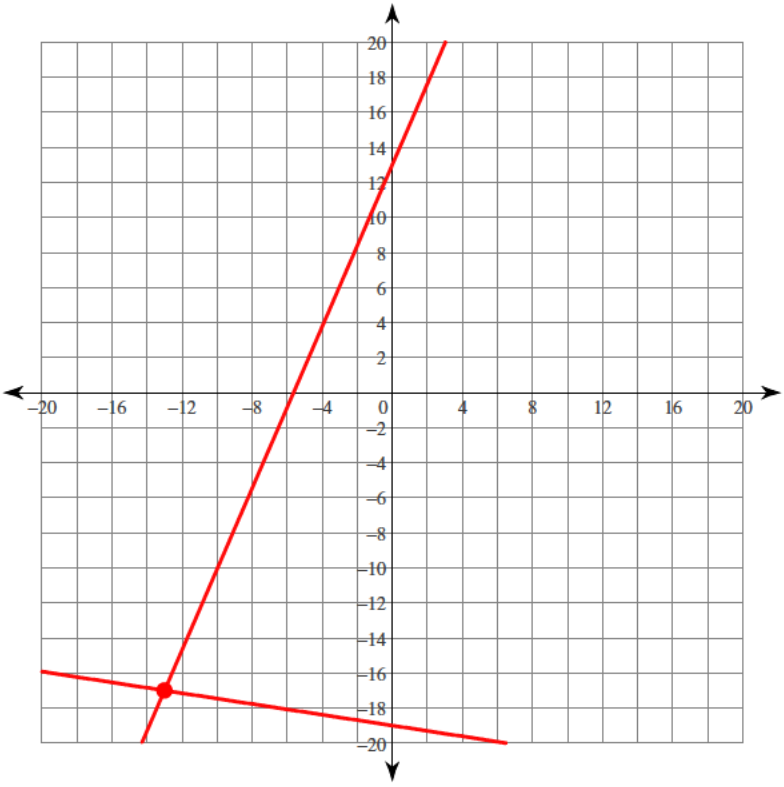
$y = \frac{14}{13}x + 4$



(–13, –10)

172) $y = \frac{30}{13}x + 13$

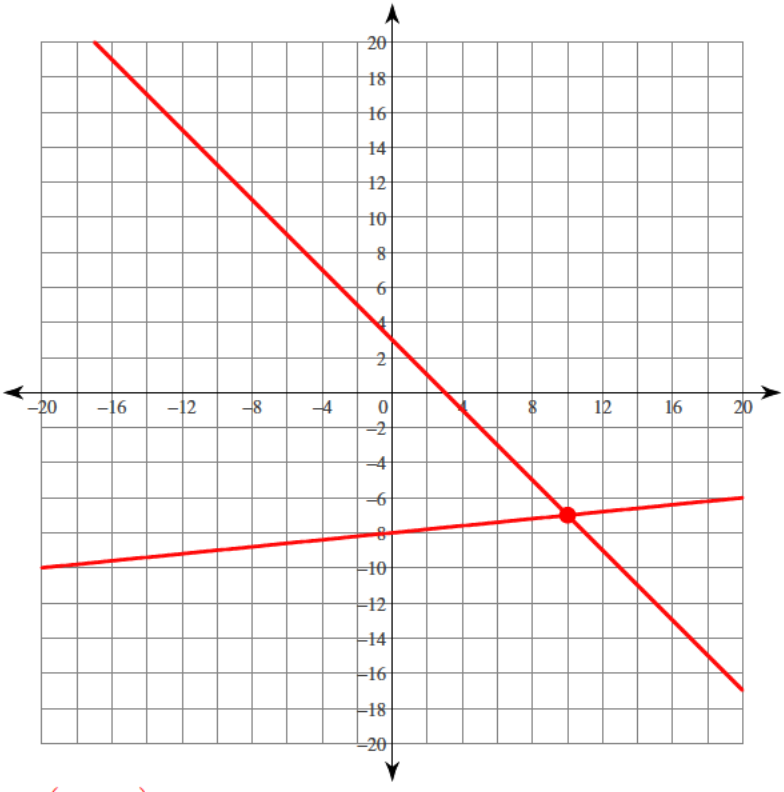
$y = -\frac{2}{13}x - 19$



$(-13, -17)$

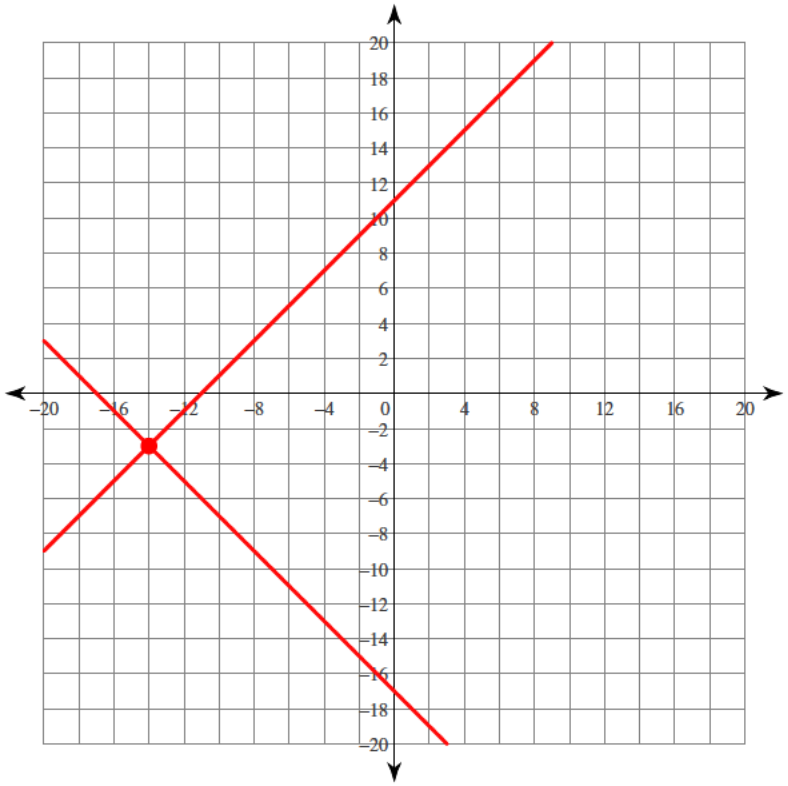
173) $y = -x + 3$

$y = \frac{1}{10}x - 8$



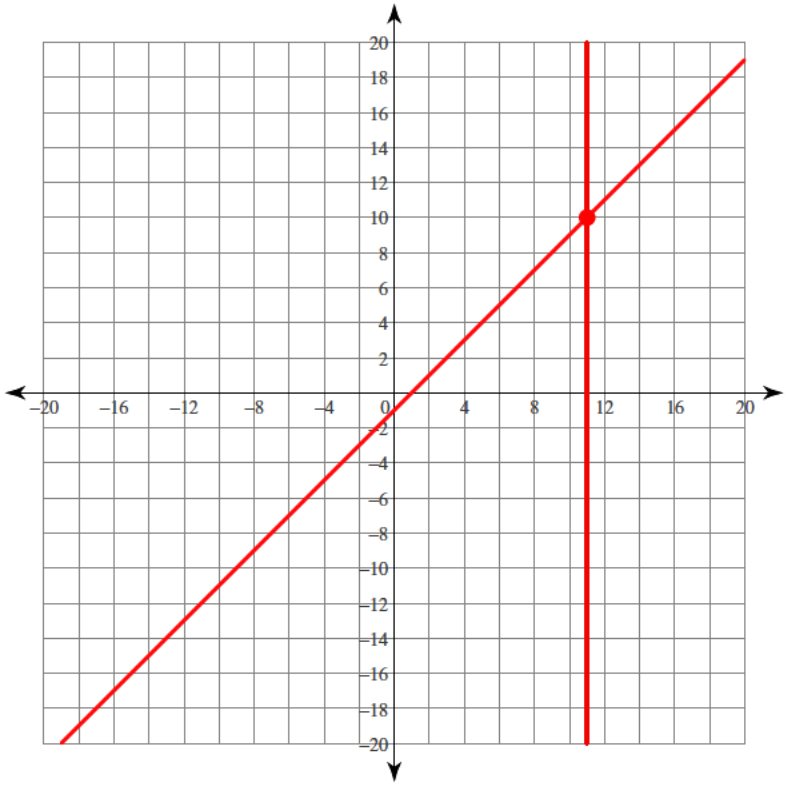
$(10, -7)$

174) $y = -x - 17$
$y = x + 11$



(–14, –3)

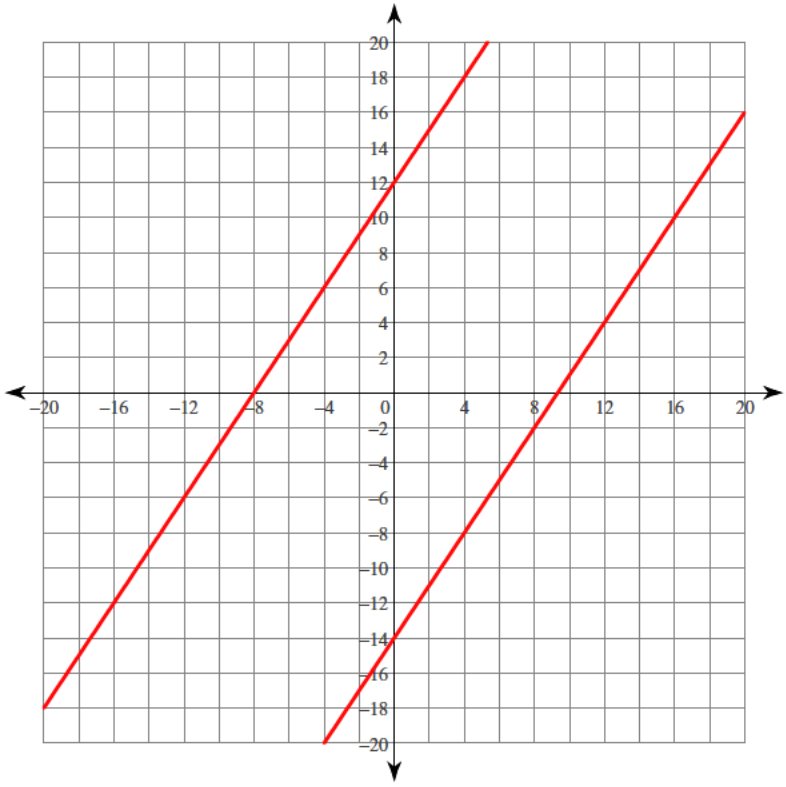
175) $y = x - 1$
$x = 11$



(11, 10)

176) $y = \frac{3}{2}x + 12$

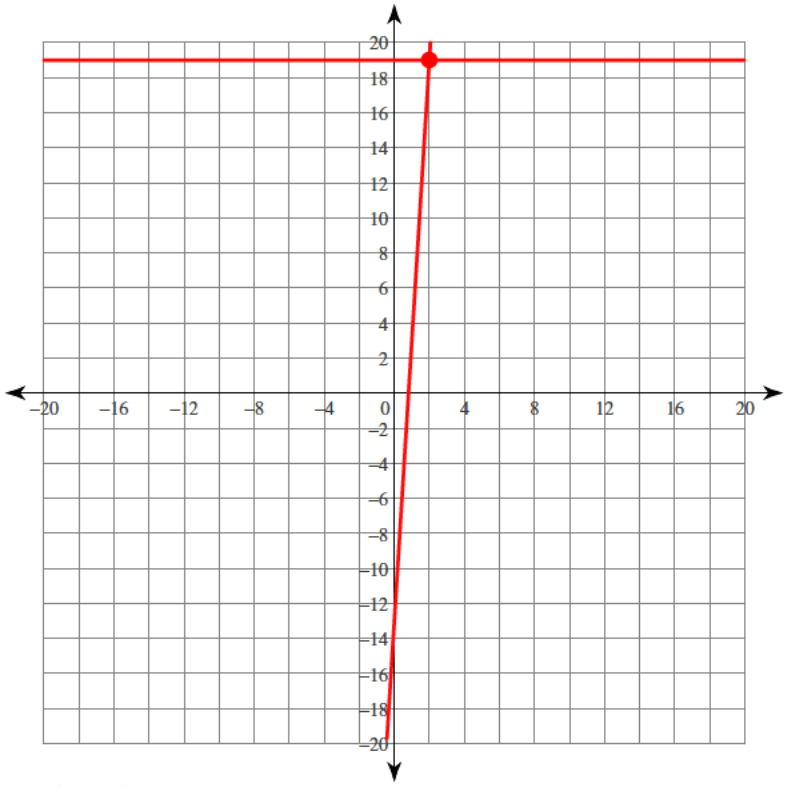
$y = \frac{3}{2}x - 14$



No solution

177) $y = 16x - 13$

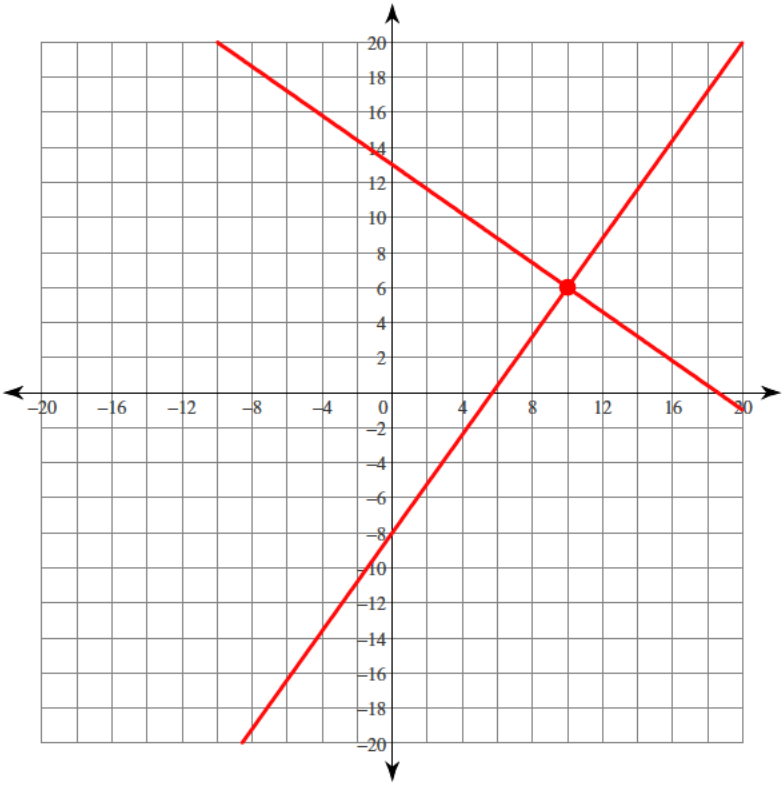
$y = 19$



(2, 19)

178) $y = \frac{7}{5}x - 8$

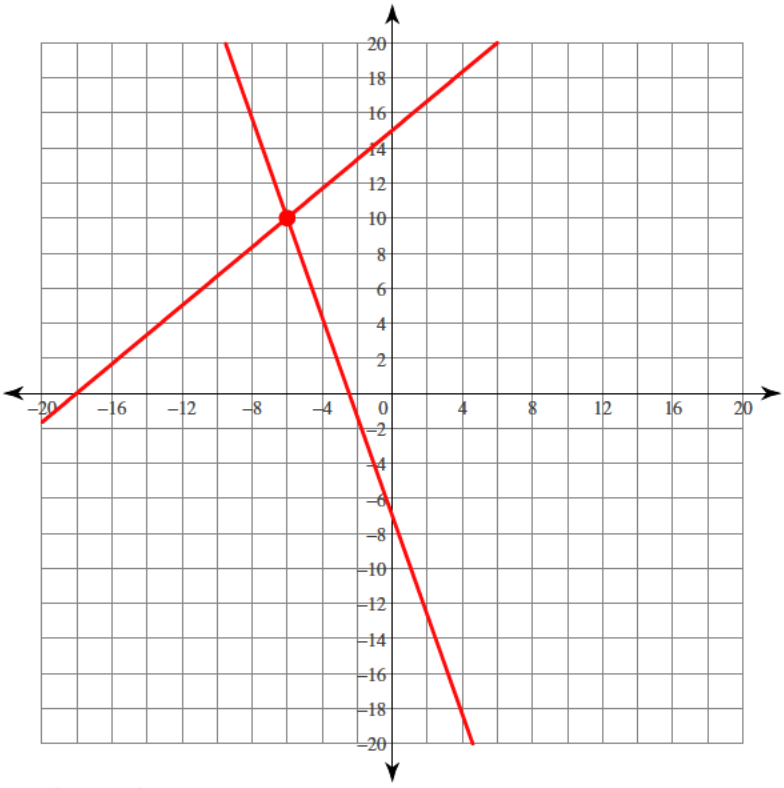
$y = -\frac{7}{10}x + 13$



(10, 6)

179) $y = -\frac{17}{6}x - 7$

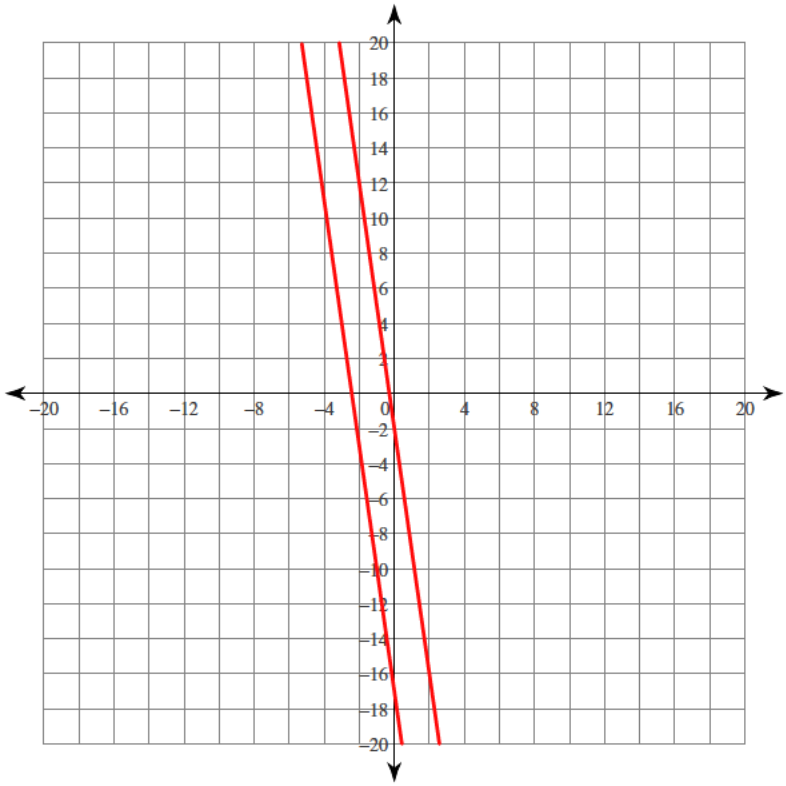
$y = \frac{5}{6}x + 15$



(–6, 10)

180) $y = -7x - 2$

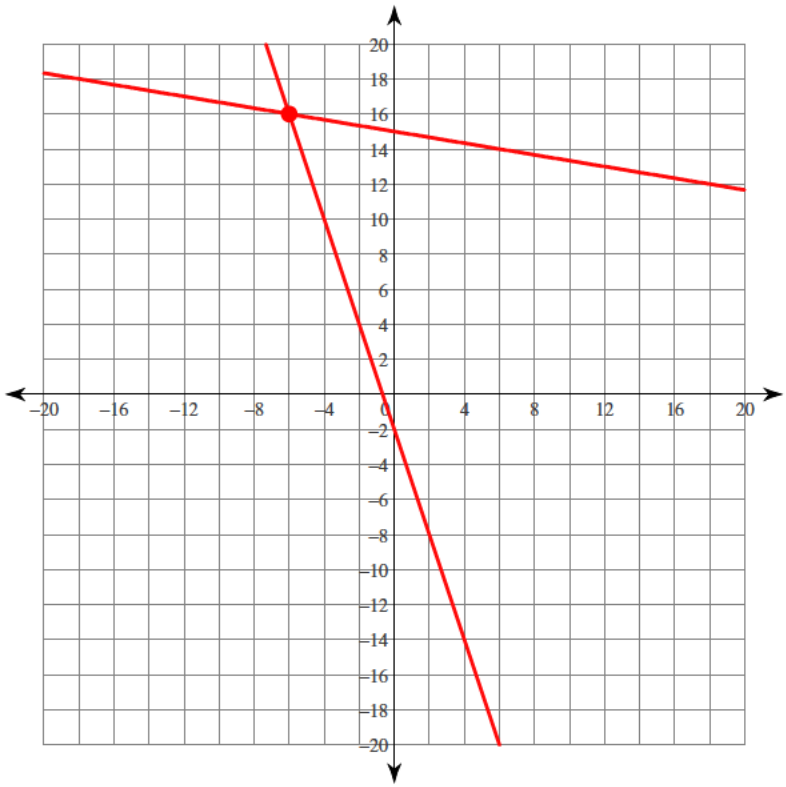
$y = -7x - 17$



No solution

181) $y = -3x - 2$

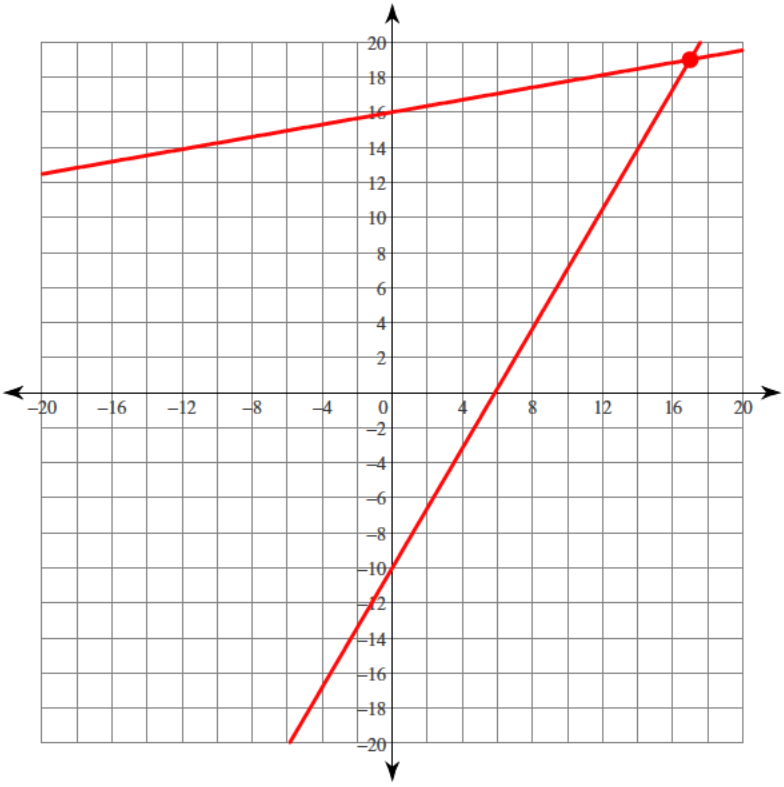
$y = -\frac{1}{6}x + 15$



(–6, 16)

182) $y = \frac{29}{17}x - 10$

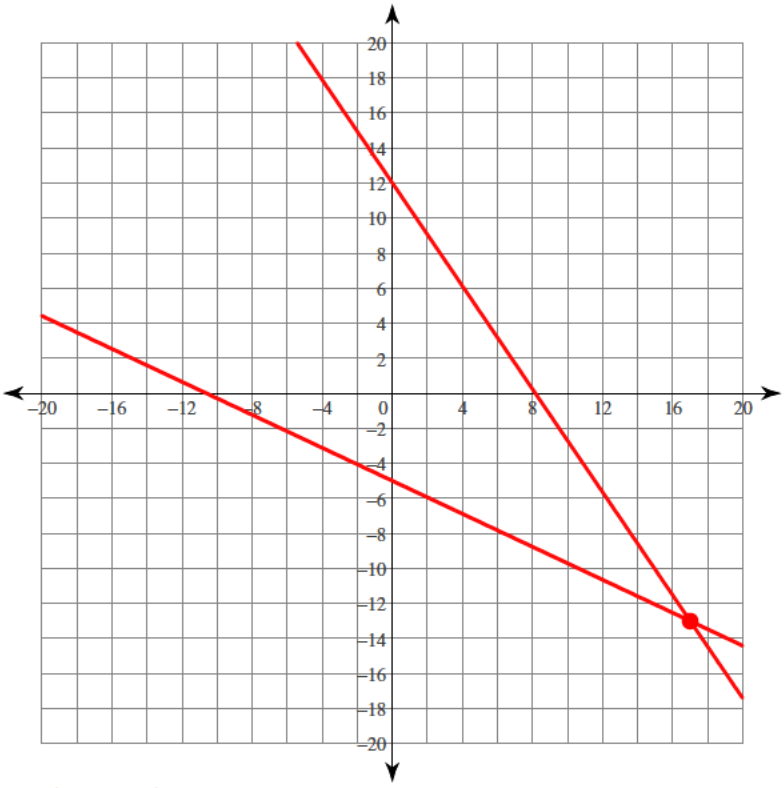
$y = \frac{3}{17}x + 16$



(17, 19)

183) $y = -\frac{8}{17}x - 5$

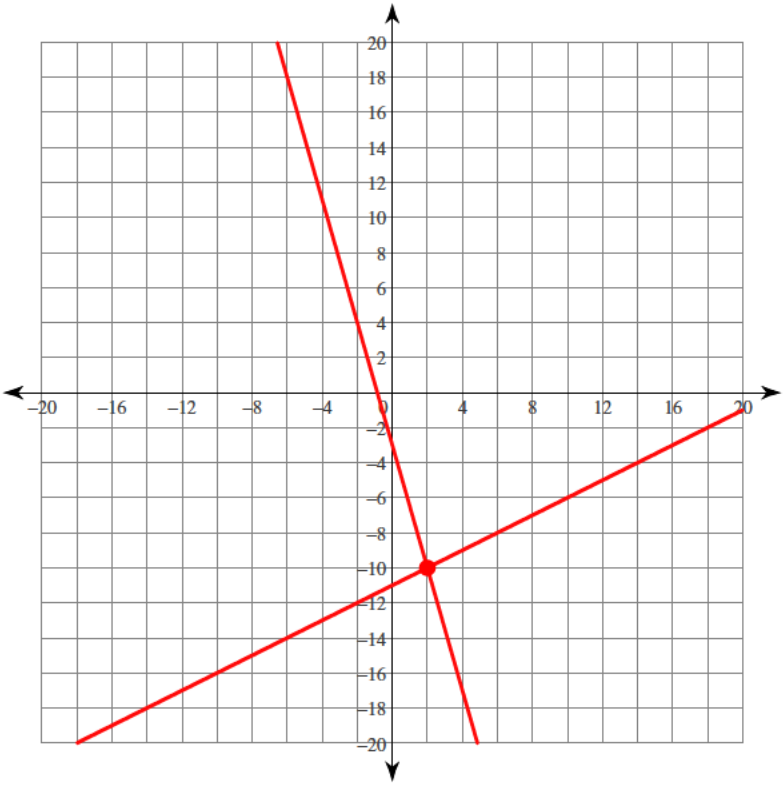
$y = -\frac{25}{17}x + 12$



(17, –13)

184) $y = \frac{1}{2}x - 11$

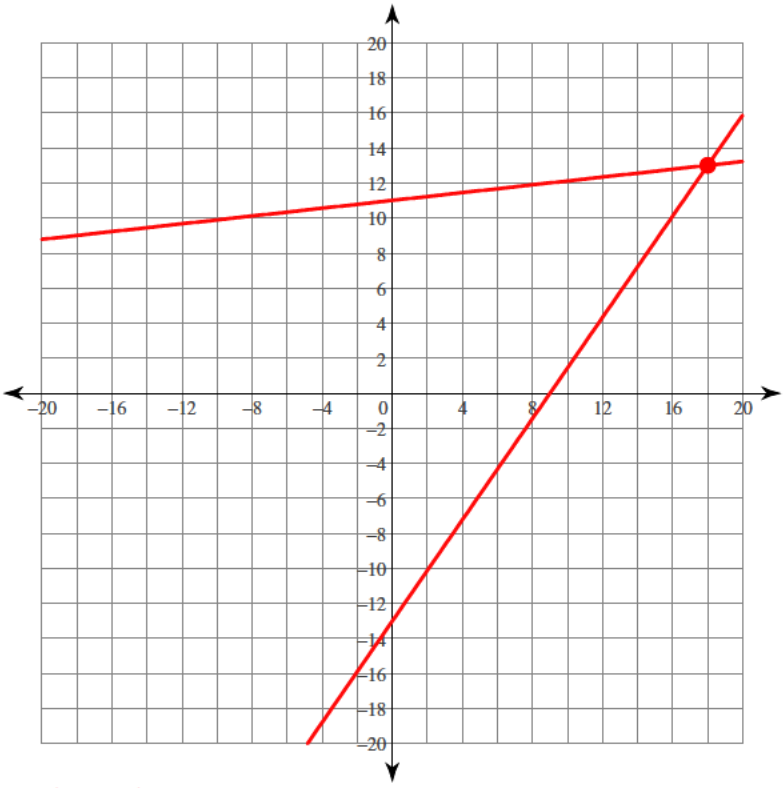
$y = -\frac{7}{2}x - 3$



(2, –10)

185) $y = \frac{13}{9}x - 13$

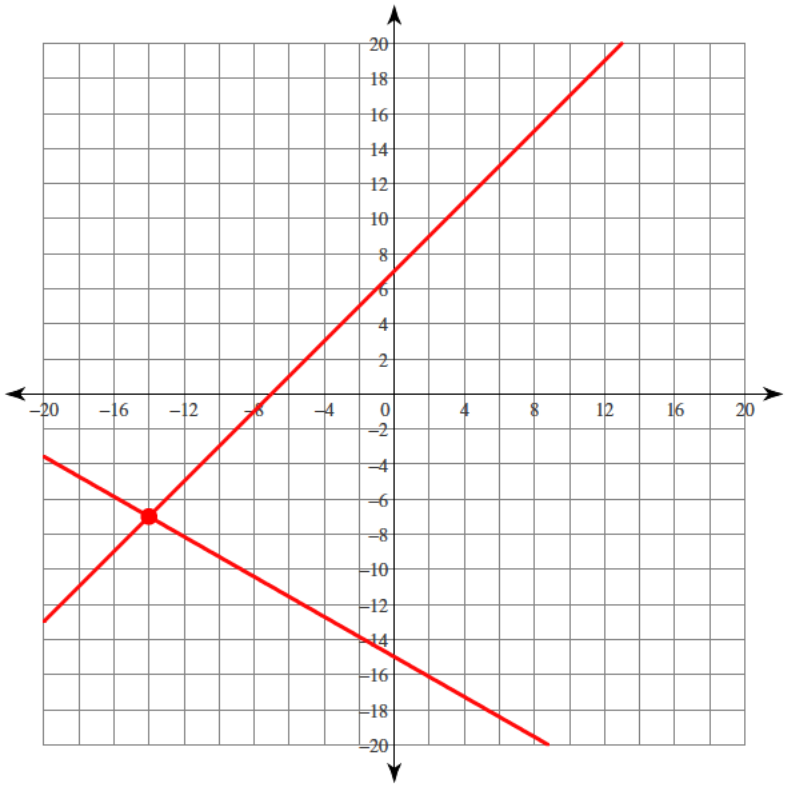
$y = \frac{1}{9}x + 11$



(18, 13)

186) $y = x + 7$

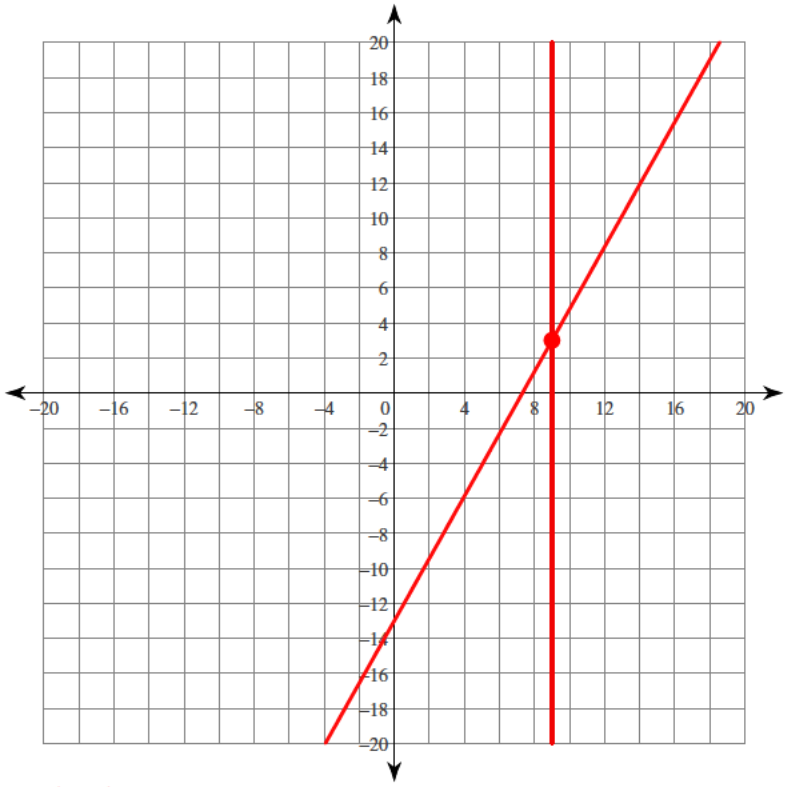
$y = -\frac{4}{7}x - 15$



(–14, –7)

187) $x = 9$

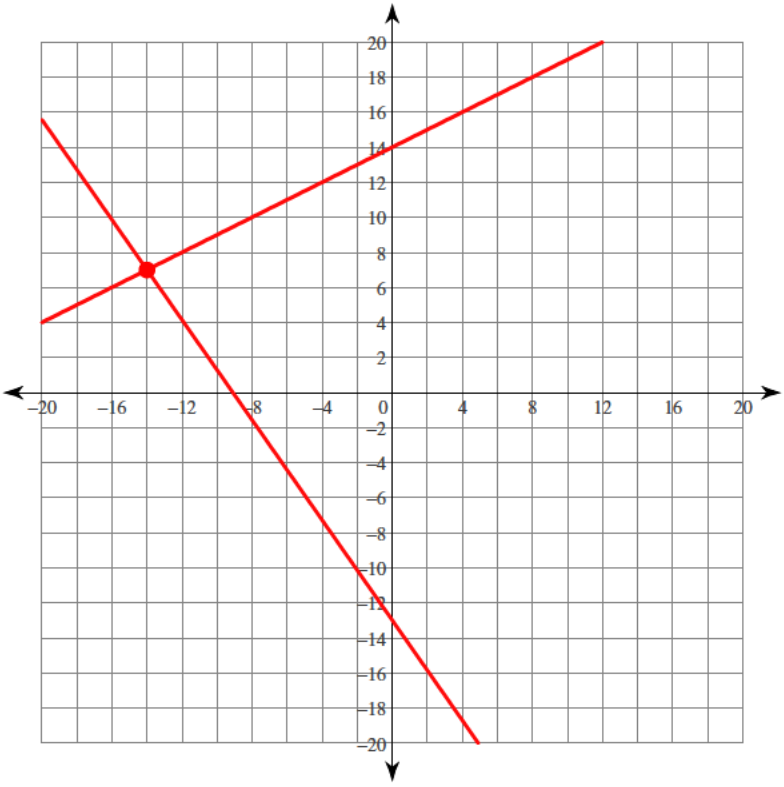
$y = \frac{16}{9}x - 13$



(9, 3)

188) $y = -\frac{10}{7}x - 13$

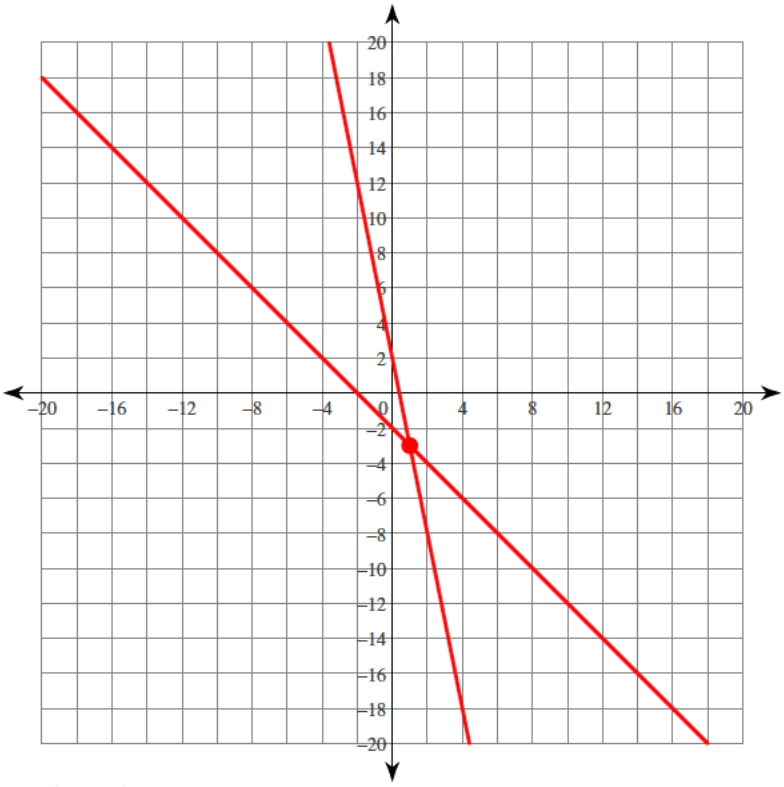
$y = \frac{1}{2}x + 14$



(–14, 7)

189) $y = -x - 2$

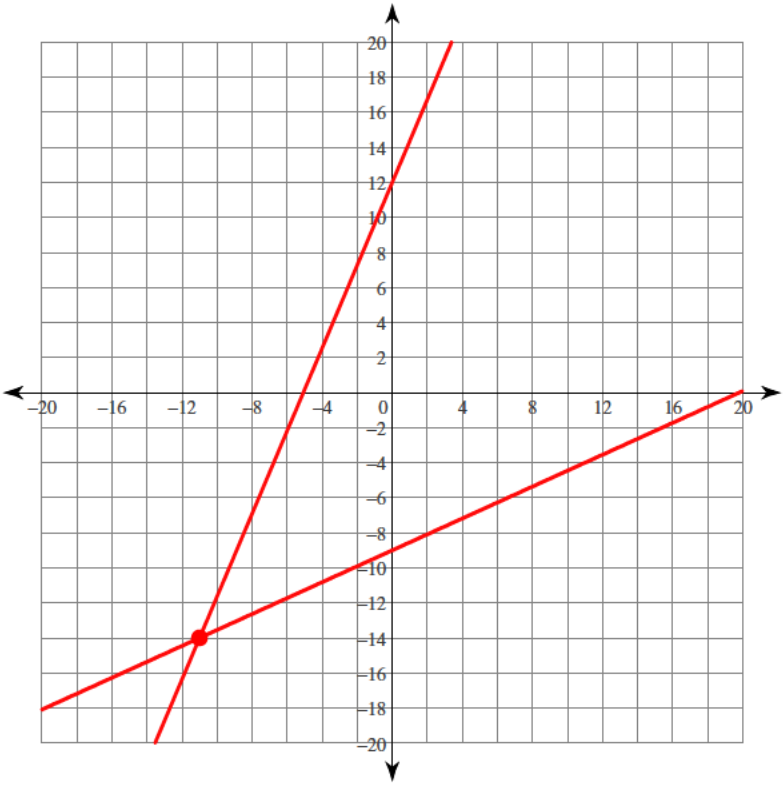
$y = -5x + 2$



(1, –3)

190) $y = \frac{5}{11}x - 9$

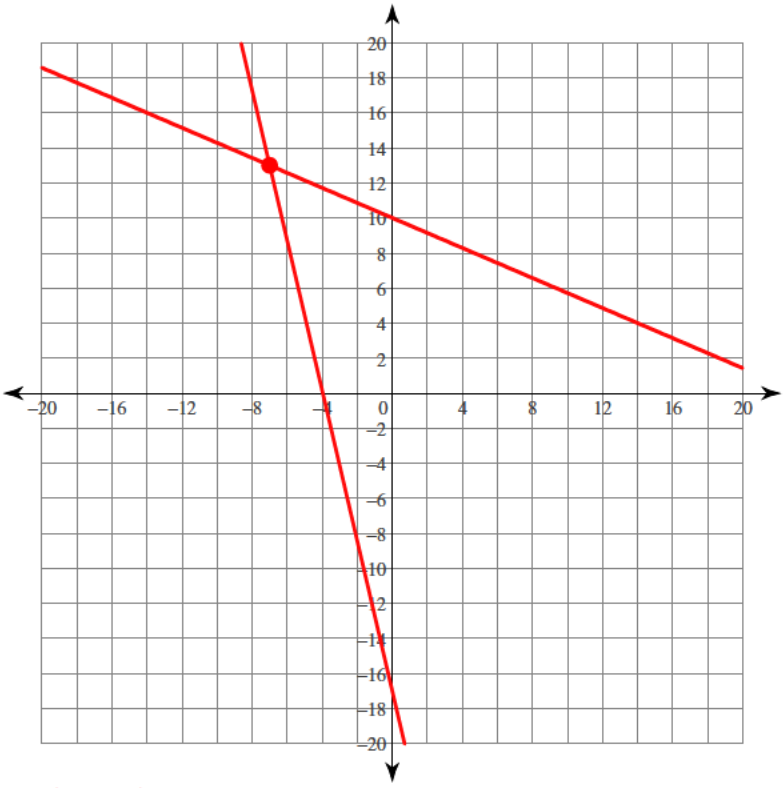
$y = \frac{26}{11}x + 12$



(–11, –14)

191) $y = -\frac{30}{7}x - 17$

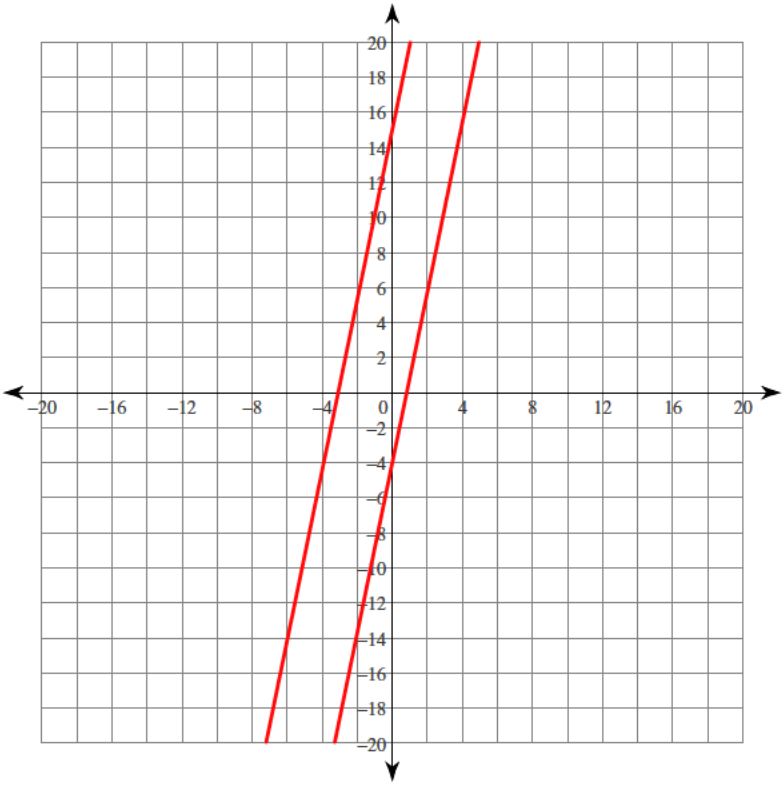
$y = -\frac{3}{7}x + 10$



(–7, 13)

192) $y = \frac{34}{7}x + 15$

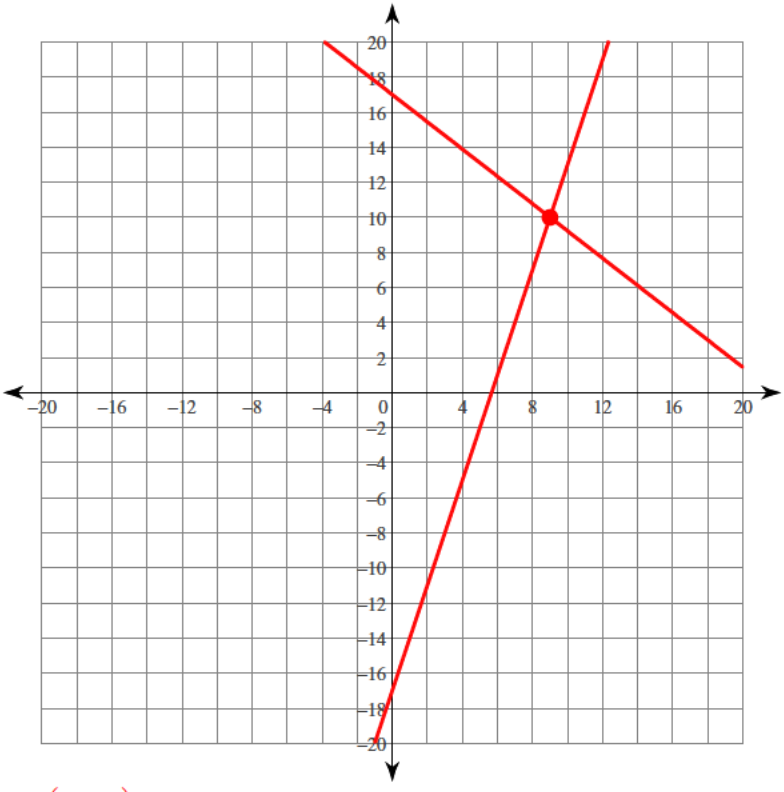
$y = \frac{34}{7}x - 4$



No solution

193) $y = 3x - 17$

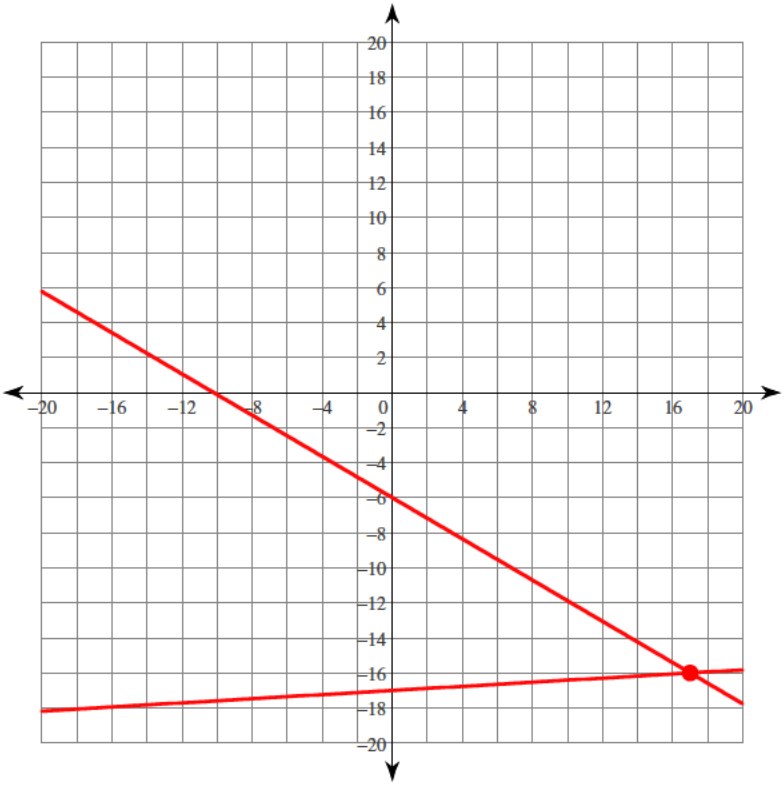
$y = -\frac{7}{9}x + 17$



(9, 10)

194) $y = -\frac{10}{17}x - 6$

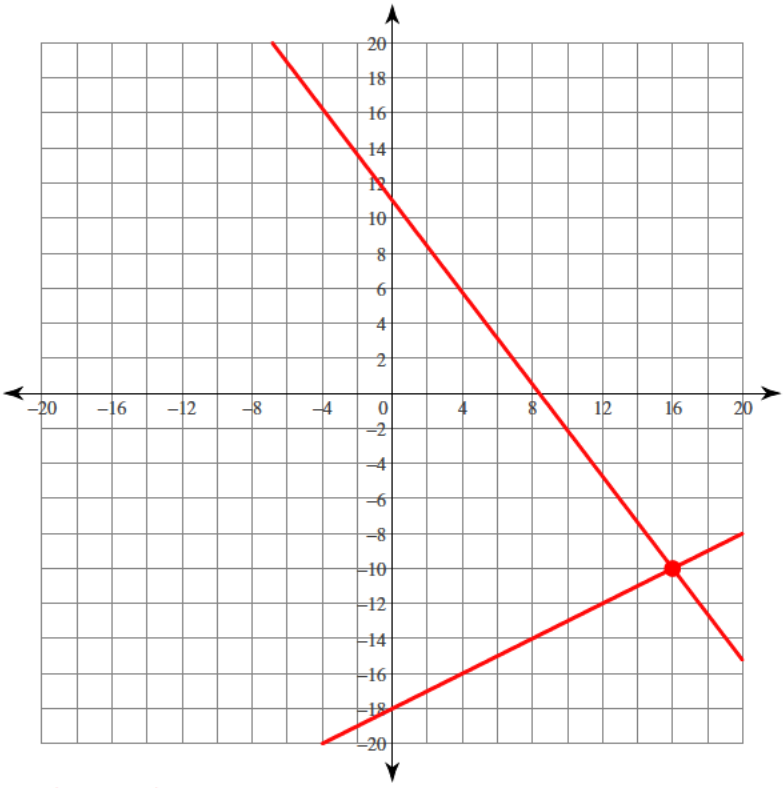
$y = \frac{1}{17}x - 17$



(17, –16)

195) $y = \frac{1}{2}x - 18$

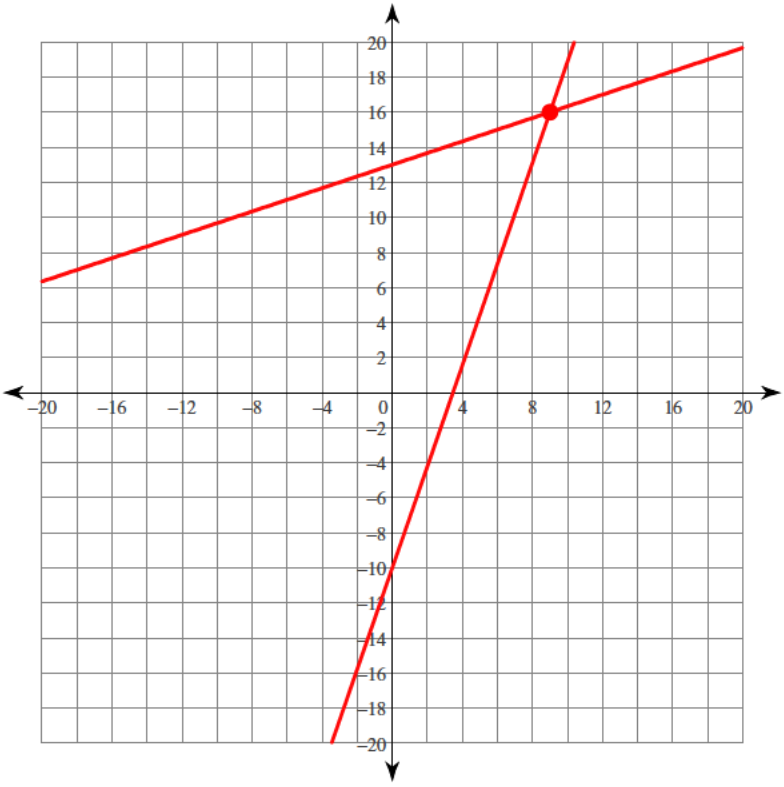
$y = -\frac{21}{16}x + 11$



(16, –10)

196) $y = \frac{26}{9}x - 10$

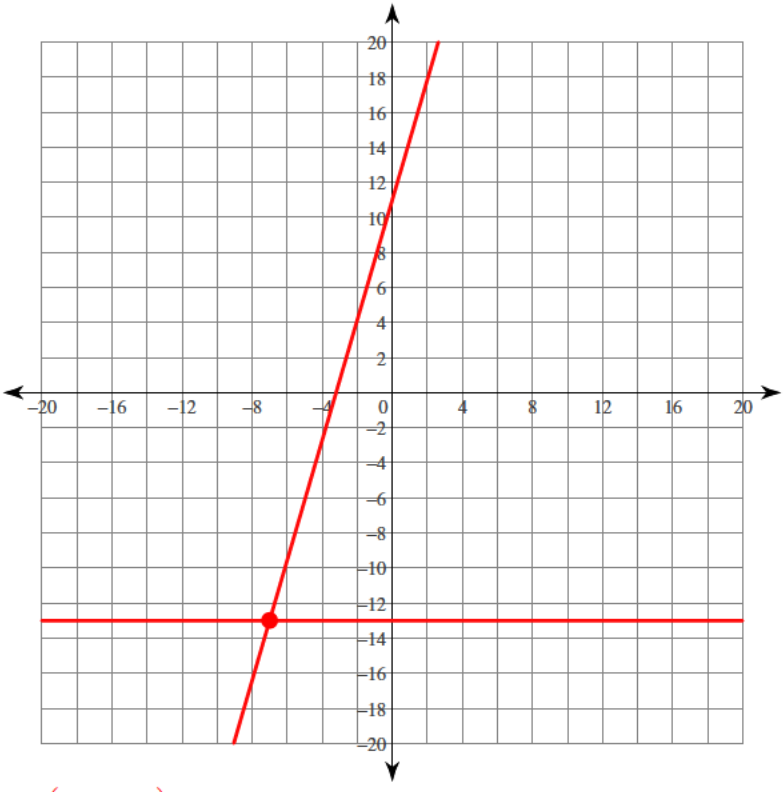
$y = \frac{1}{3}x + 13$



(9, 16)

197) $y = \frac{24}{7}x + 11$

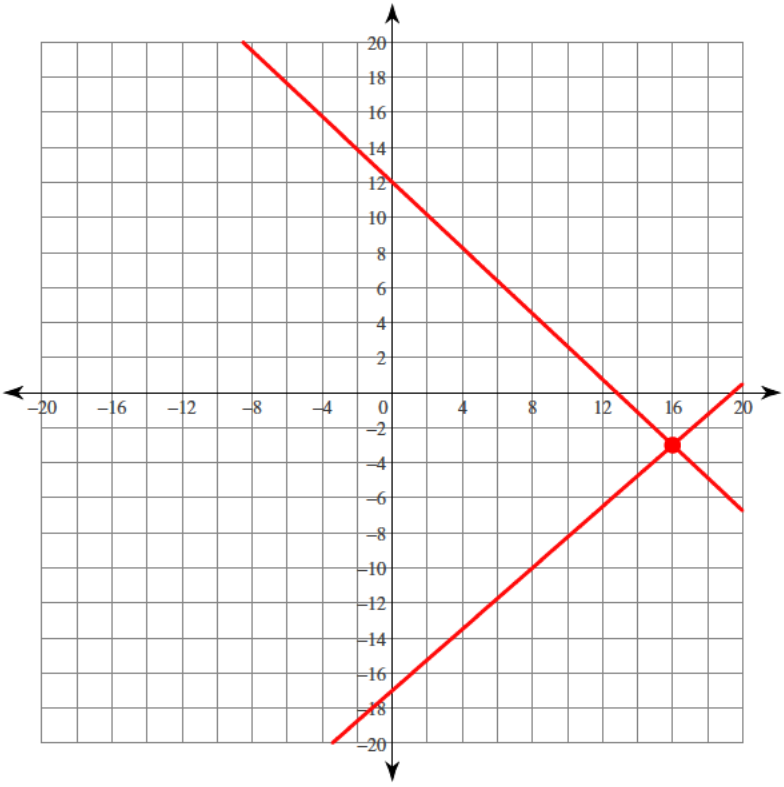
$y = -13$



(–7, –13)

198) $y = \frac{7}{8}x - 17$

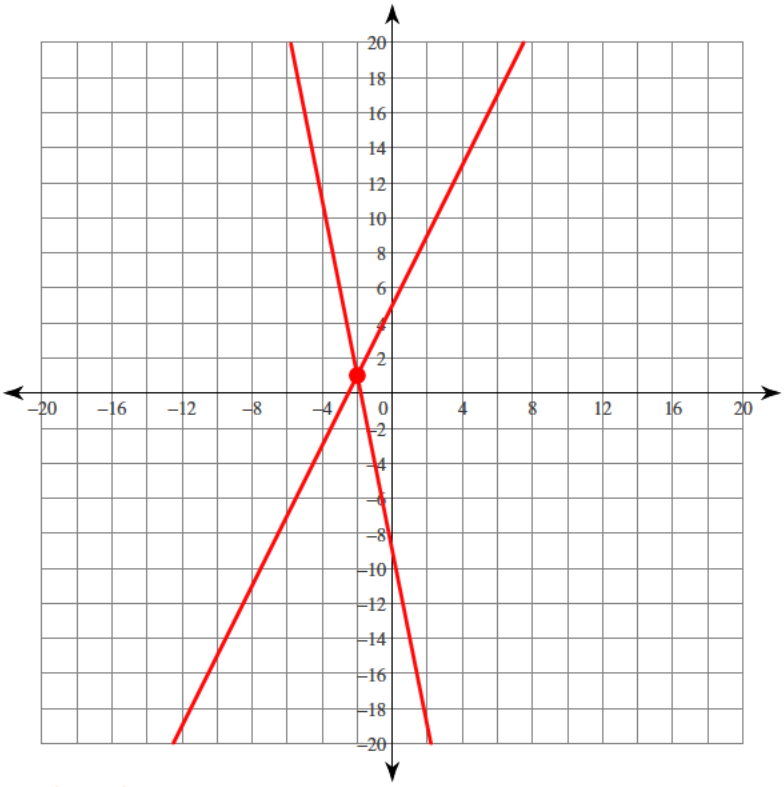
$y = -\frac{15}{16}x + 12$



(16, –3)

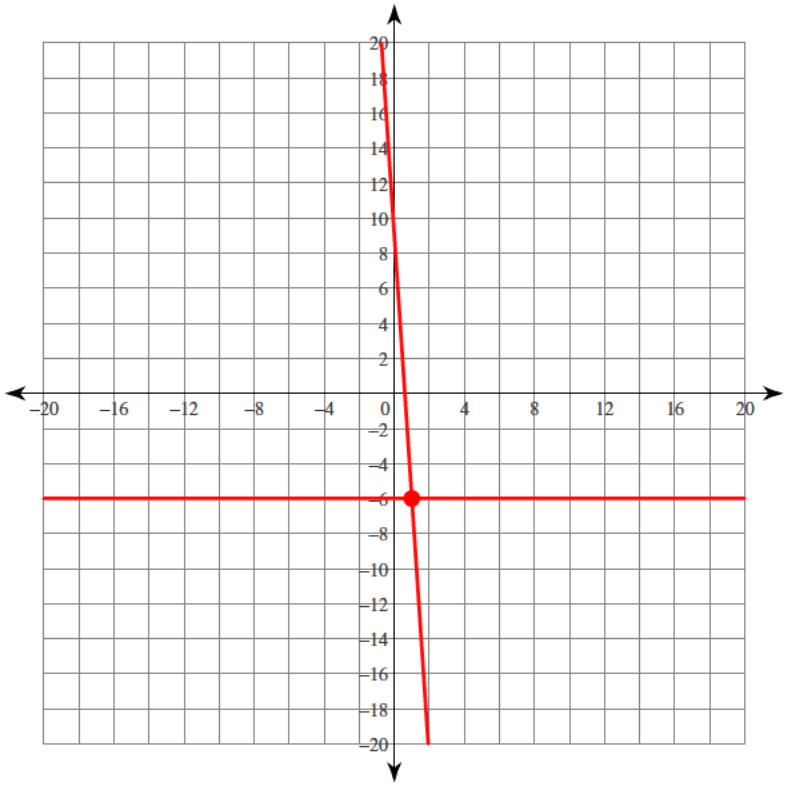
199) $y = -5x - 9$

$y = 2x + 5$



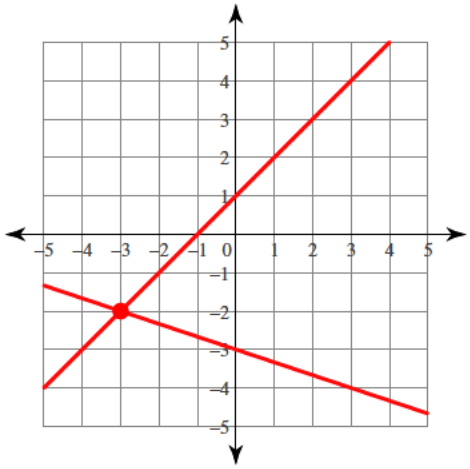
(–2, 1)

200) $y = -6$
$y = -15x + 9$



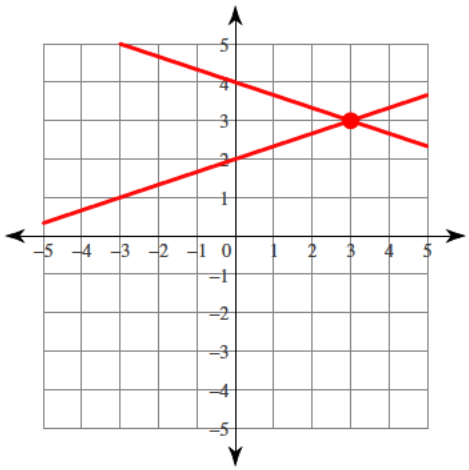
(1, –6)

201) $9 = -3y - x$
$1 + x = y$



(–3, –2)

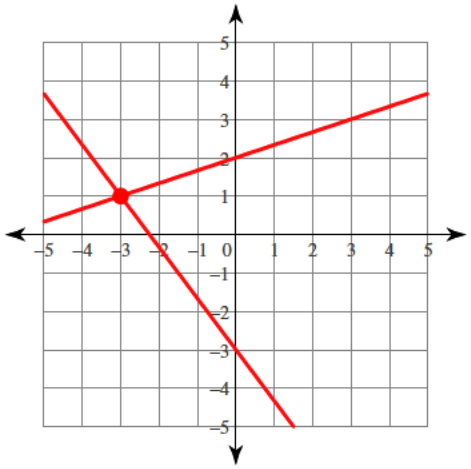
202) $\frac{1}{4}y = 1 - \frac{1}{12}x$
$0 = -6 - x + 3y$



(3, 3)

203) $-2 = -y + \frac{1}{3}x$

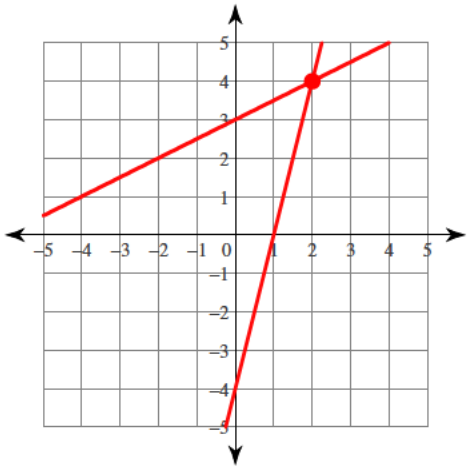
$18 + 6y = -8x$



(–3, 1)

204) $4 = 4x - y$

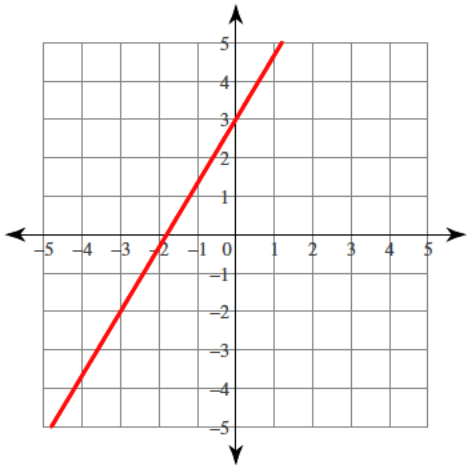
$6 = -x + 2y$



(2, 4)

205) $-9 = -3y + 5x$

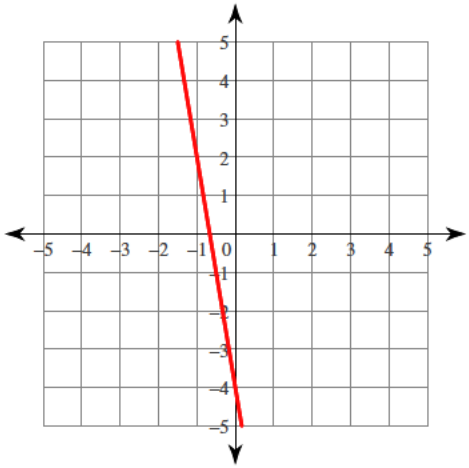
$0 = 1 - \frac{1}{3}y + \frac{5}{9}x$



Infinite number of solutions

206) $y + 6x = -4$

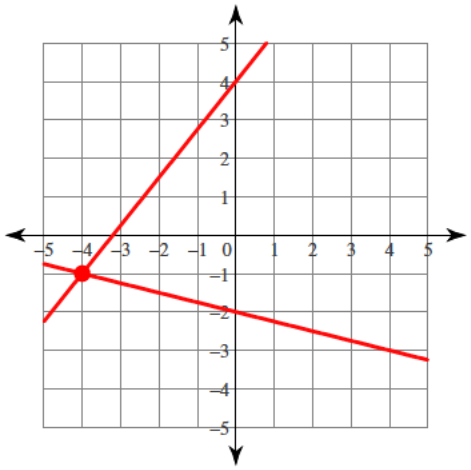
$-y - 6x - 4 = 0$



Infinite number of solutions

207) $-x - 8 = 4y$

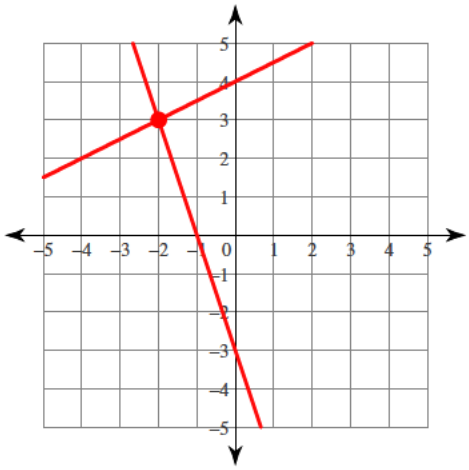
$-8y = -32 - 10x$



(–4, –1)

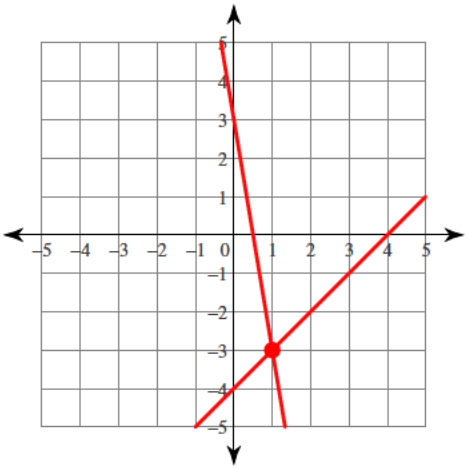
208) $2y = x + 8$

$3 + y + 3x = 0$



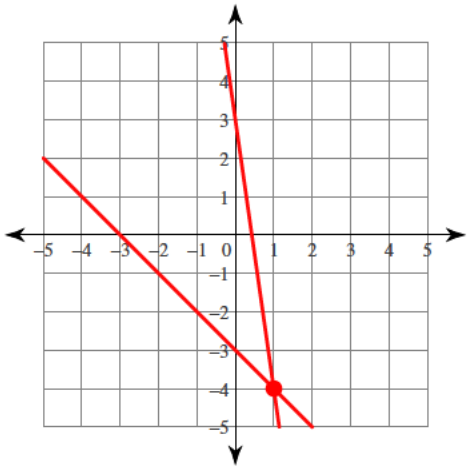
(–2, 3)

209) $0 = -y - 4 + x$
$6x + y = 3$



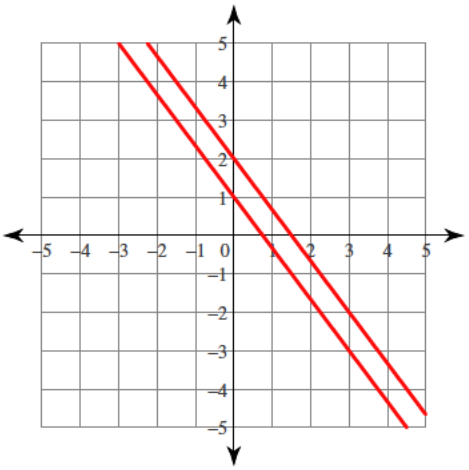
(1, –3)

210) $-9 + 21x + 3y = 0$
$3 + x = -y$



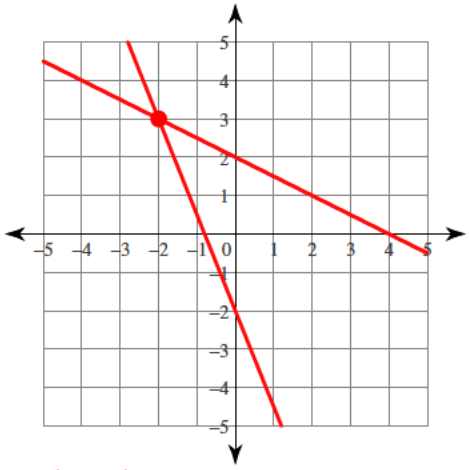
(1, –4)

211) $0 = 4x + 3y - 6$
$4x + 3y = 3$



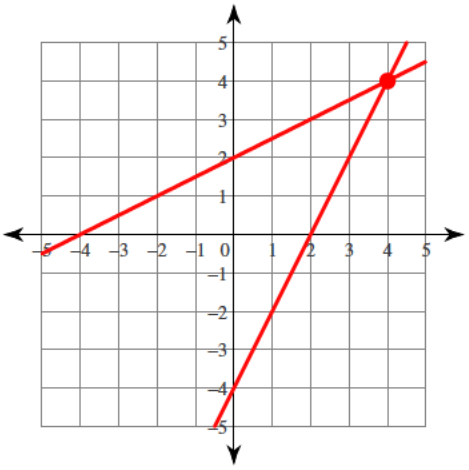
No solution

212) $-1 = -\frac{1}{4}x - \frac{1}{2}y$
$0 = 4 + 5x + 2y$



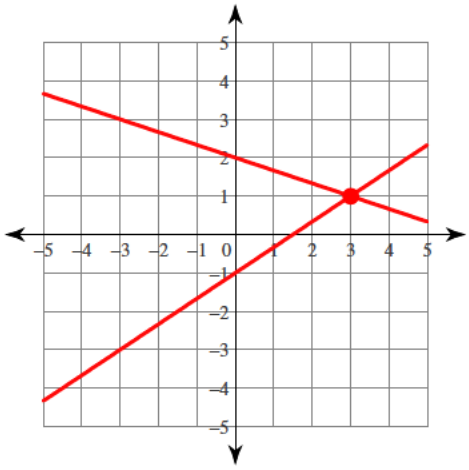
(–2, 3)

213) $0 = -y + 2x - 4$
$0 = 12 - 6y + 3x$



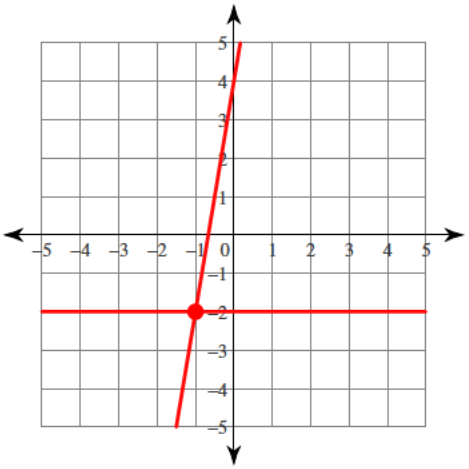
(4, 4)

214) $6 - x - 3y = 0$
$3 = 2x - 3y$



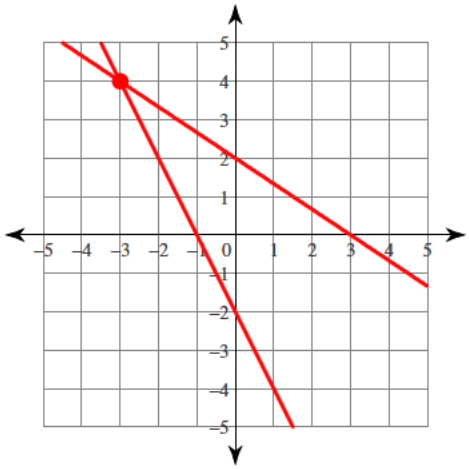
(3, 1)

215) $0 = -8 + 2y - 12x$
$-y - 2 = 0$



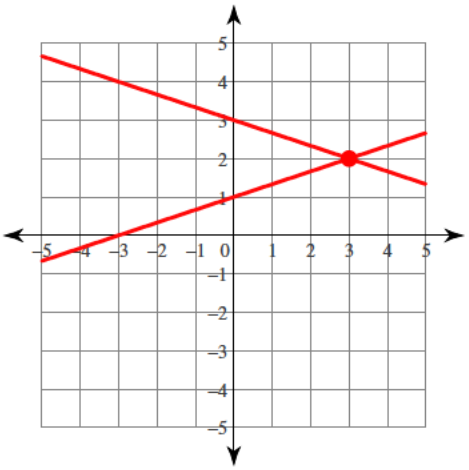
(–1, –2)

216) $6 + 6x = -3y$
$-2x = -6 + 3y$



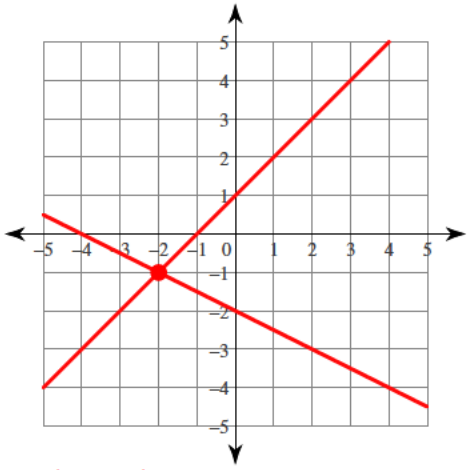
(–3, 4)

217) $x + 3y - 9 = 0$
$-x + 3y - 3 = 0$



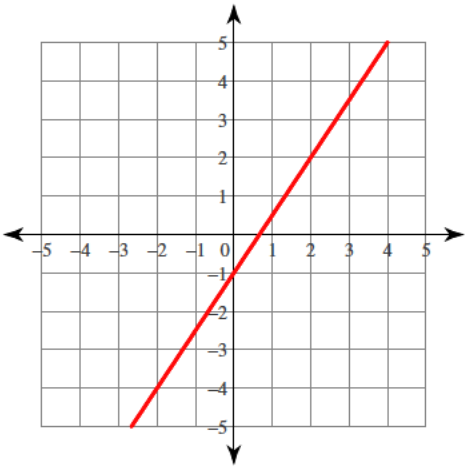
(3, 2)

218) $-2 - y = \frac{1}{2}x$
$-y = -x - 1$



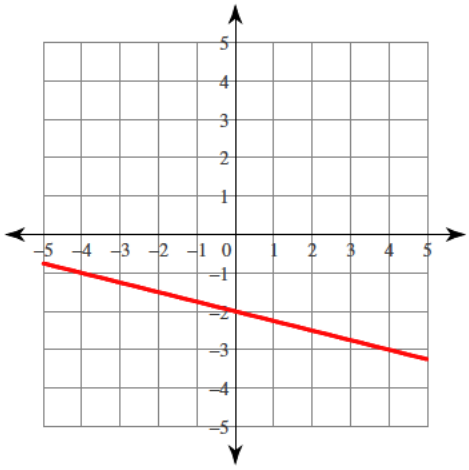
(–2, –1)

219) $0 = -3x + 2 + 2y$
$2 + 2y = 3x$



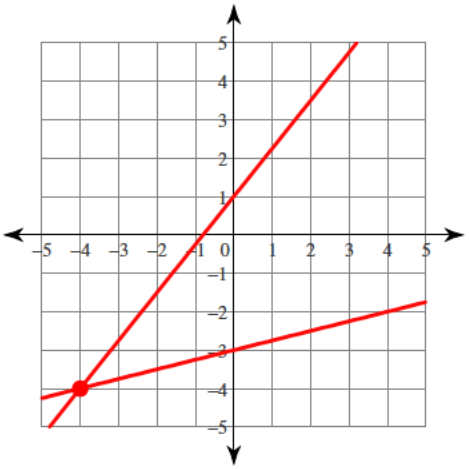
Infinite number of solutions

220) $x + 4y + 8 = 0$
$4y + 8 + x = 0$



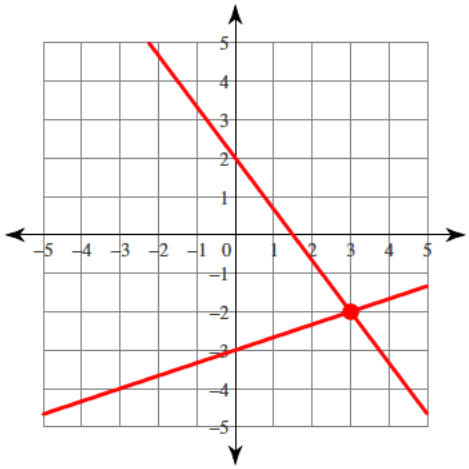
Infinite number of solutions

221) $-8y + 10x = -8$
$0 = 12 - x + 4y$



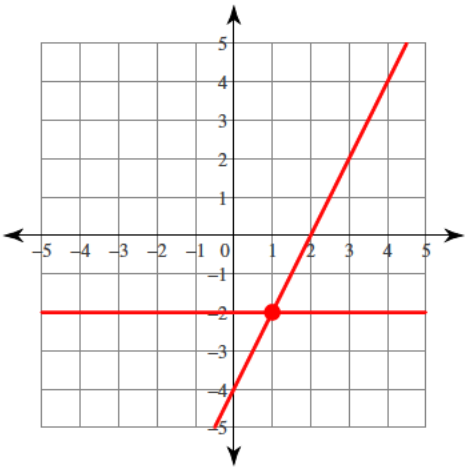
(–4, –4)

222) $3y = 6 - 4x$
$3y - x = -9$



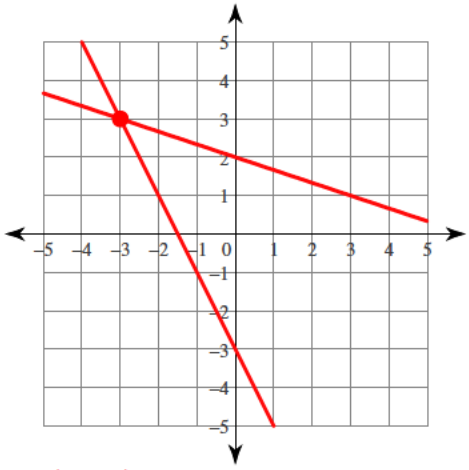
(3, –2)

223) $-8 + 4x = 2y$
$2 = -y$



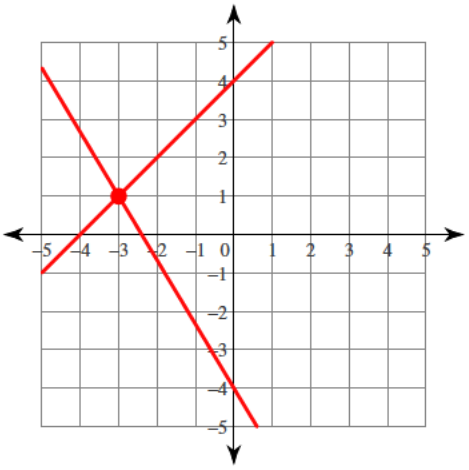
(1, –2)

224) $-2x + 12 - 6y = 0$
$-x - \frac{3}{2} = \frac{1}{2}y$



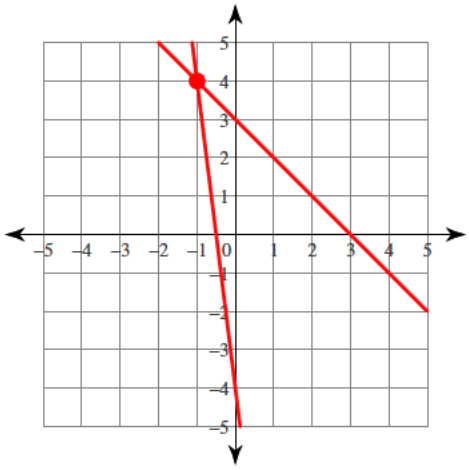
(–3, 3)

225) $-12 = 5x + 3y$
$12 - 3y = -3x$



(–3, 1)

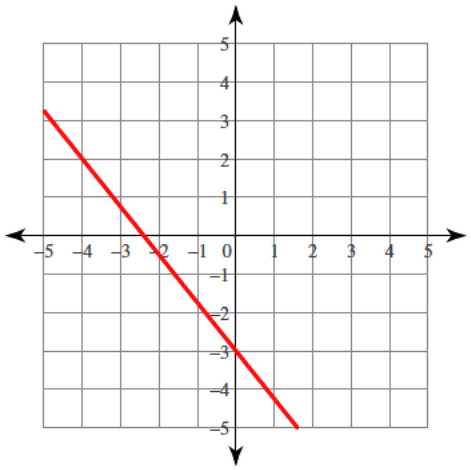
226) $-8x - y = 4$
$-3 = -y - x$



(–1, 4)

227) $-\frac{24}{5} - \frac{8}{5}y = 2x$

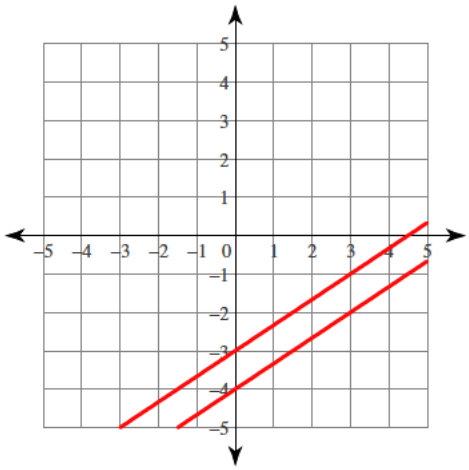
$12 = -4y - 5x$



Infinite number of solutions

228) $0 = -2x + 12 + 3y$

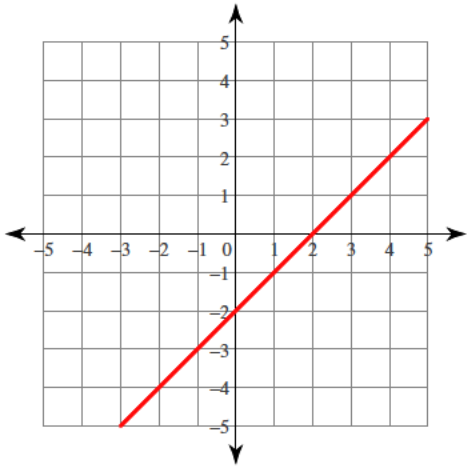
$-x + \frac{3}{2}y = -\frac{9}{2}$



No solution

229) $-2 = y - x$

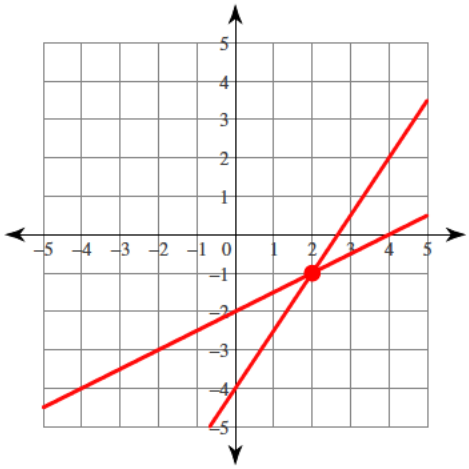
$2 = -y + x$



Infinite number of solutions

230) $-4 - 2y + x = 0$

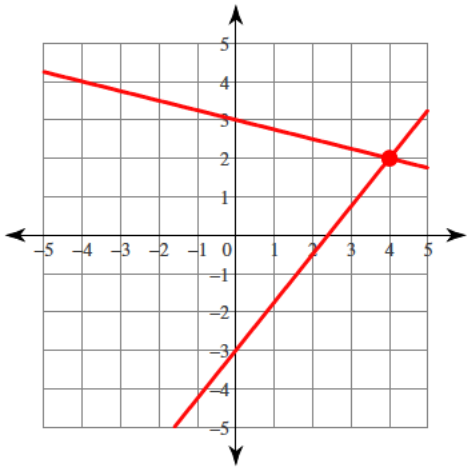
$4 - \frac{3}{2}x = -y$



(2, –1)

231) $x = 12 - 4y$

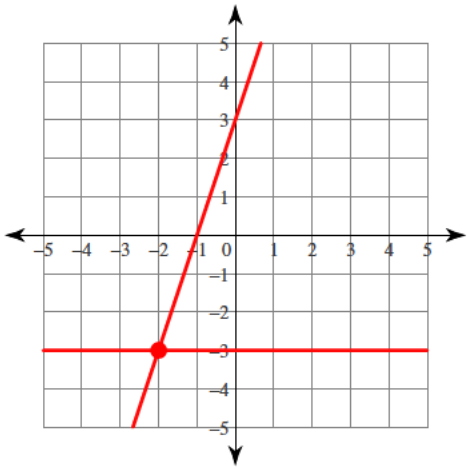
$10x - 24 = 8y$



(4, 2)

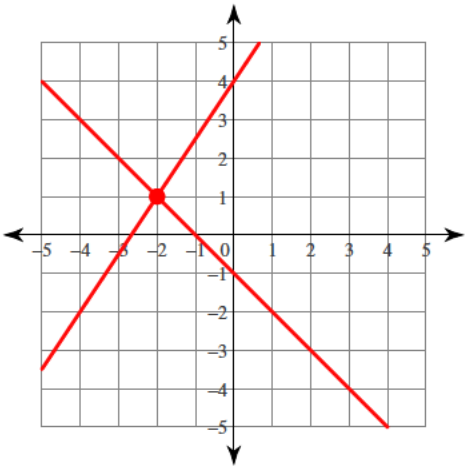
232) $0 = 3x - y + 3$

$0 = -3 - y$



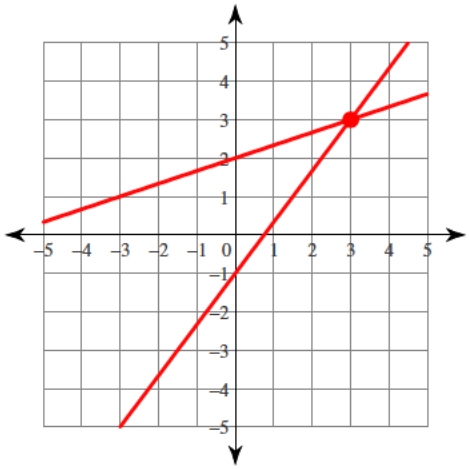
(–2, –3)

233) $8 - 2y = -3x$
$y + 1 + x = 0$



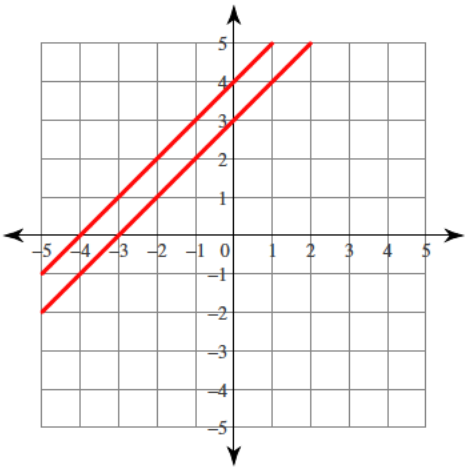
(–2, 1)

234) $x = 3y - 6$
$-3 + 4x = 3y$



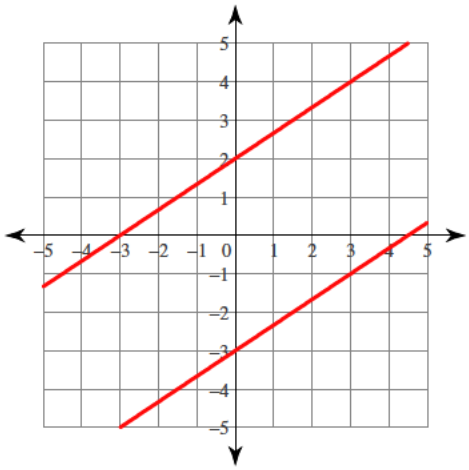
(3, 3)

235) $8 + 2x = 2y$
$0 = 3 - y + x$



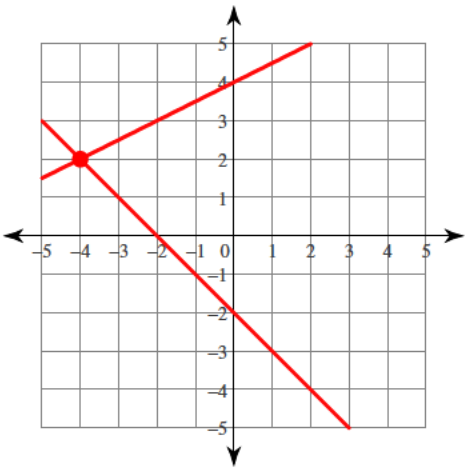
No solution

236) $6 = 3y - 2x$
$-6x = -9y - 27$



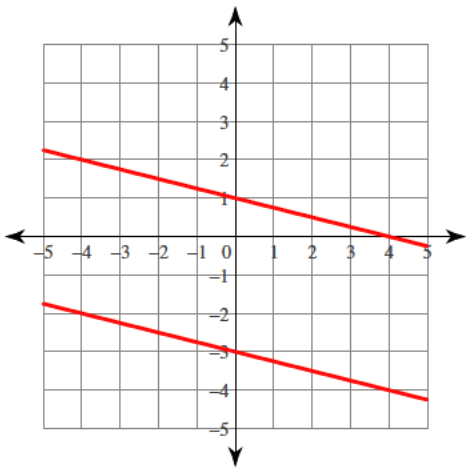
No solution

237) $2y - x = 8$
$x = -2 - y$



(–4, 2)

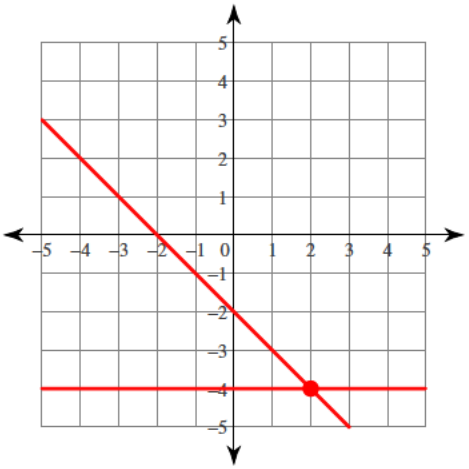
238) $-12 = 4y + x$
$-3y = -3 + \frac{3}{4}x$



No solution

239) $2 = -y - x$

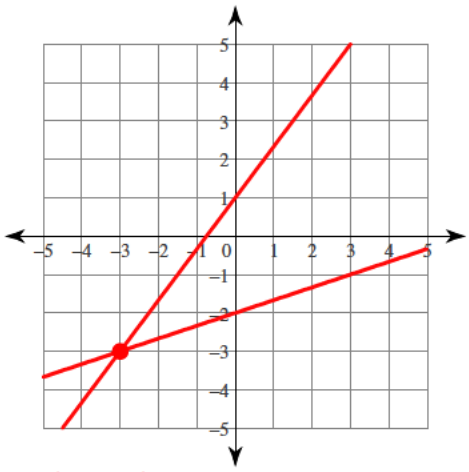
$-4 = y$



(2, –4)

240) $\frac{3}{4} - \frac{3}{4}y = -x$

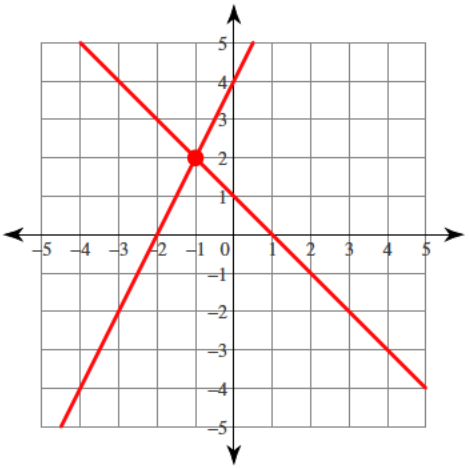
$0 = y + 2 - \frac{1}{3}x$



(–3, –3)

241) $4 + 2x - y = 0$

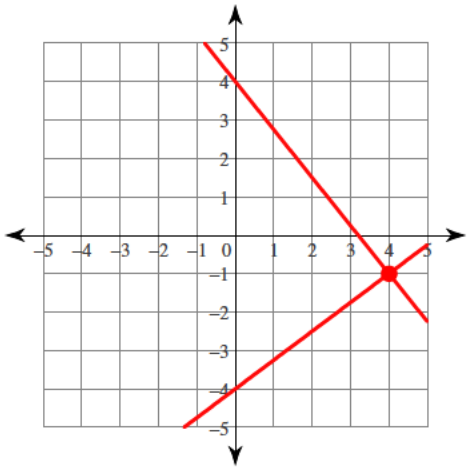
$2y - 2 = -2x$



(–1, 2)

242) $-16 = -5x - 4y$

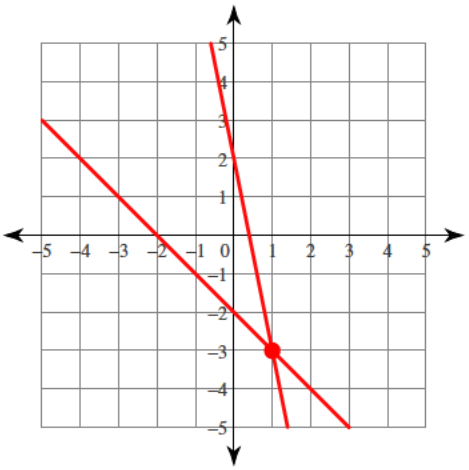
$x - \frac{4}{3}y = \frac{16}{3}$



(4, –1)

243) $0 = x + 2 + y$

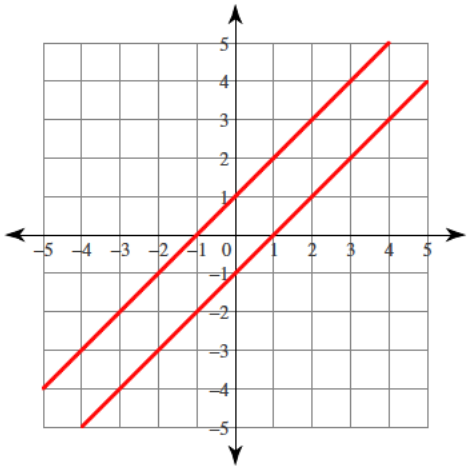
$\frac{6}{5} = 3x + \frac{3}{5}y$



(1, –3)

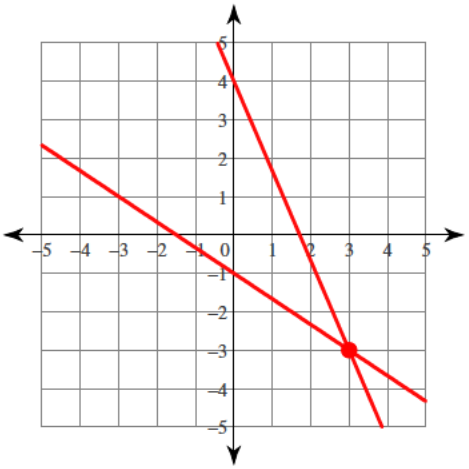
244) $-1 - x + y = 0$

$-y + x = 1$



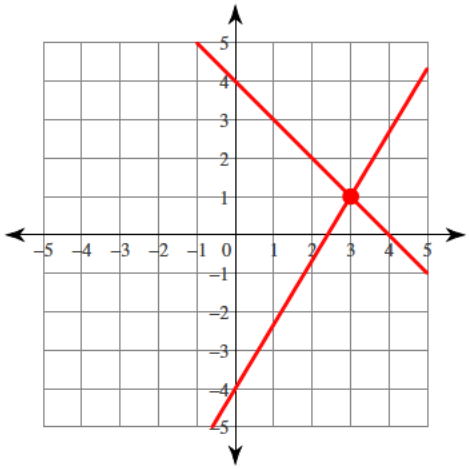
No solution

245) $21x - 36 = -9y$
$3 + 3y = -2x$



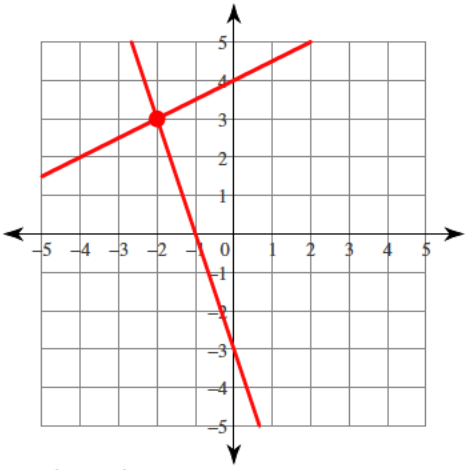
(3, –3)

246) $3x = 12 - 3y$
$-12 - 3y = -5x$



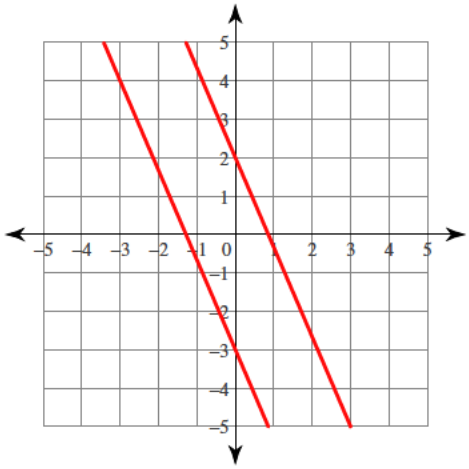
(3, 1)

247) $-x - \frac{1}{3}y = 1$
$-4y + 2x + 16 = 0$



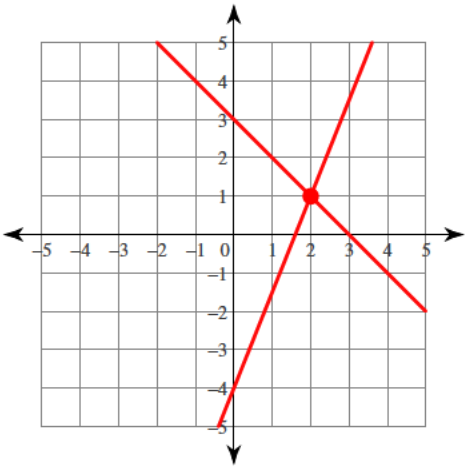
(–2, 3)

248) $-27 - 21x = 9y$
$0 = 6 - 3y - 7x$



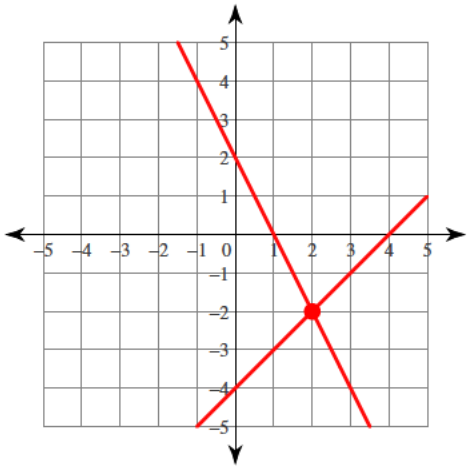
No solution

249) $-3 + y = -x$
$15x = 24 + 6y$



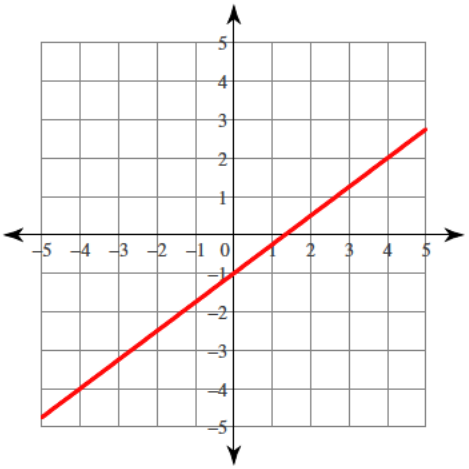
(2, 1)

250) $-4 = y - x$
$4 = 2y + 4x$



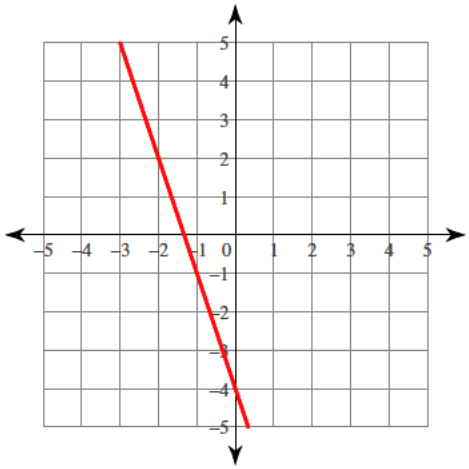
(2, –2)

251) $4y = -4 + 3x$
$3x - 4y = 4$



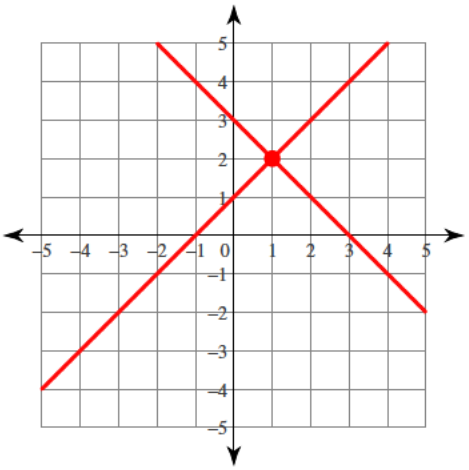
Infinite number of solutions

252) $3x + y = -4$
$-4 - 3x = y$



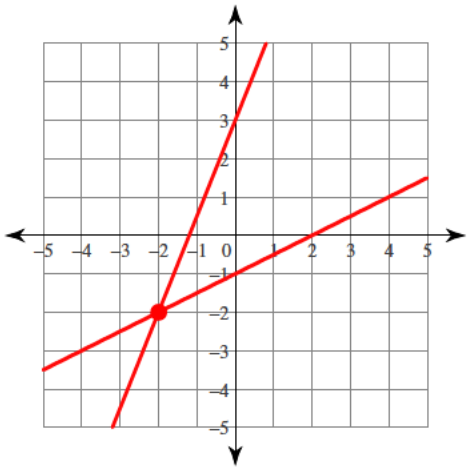
Infinite number of solutions

253) $-y - x = -3$
$x = -1 + y$



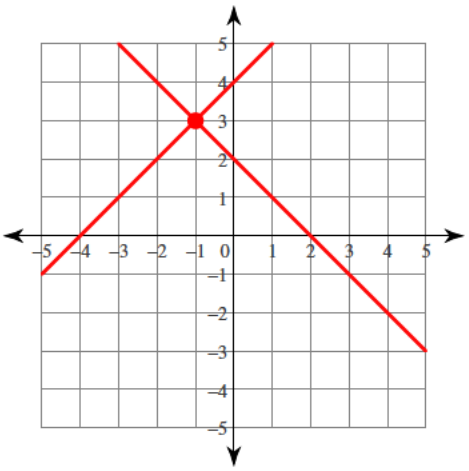
(1, 2)

254) $-6 - 5x = -2y$
$2y + 2 - x = 0$



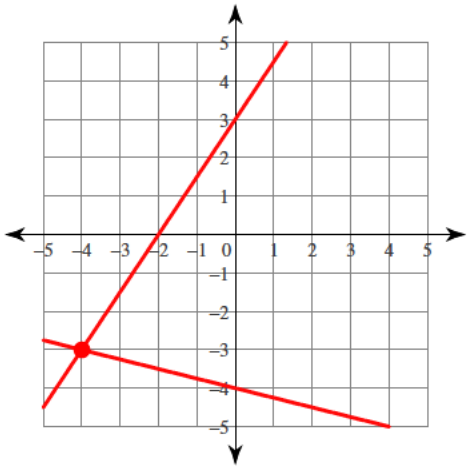
(–2, –2)

255) $0 = 4 + x - y$
$-y - x + 2 = 0$



(–1, 3)

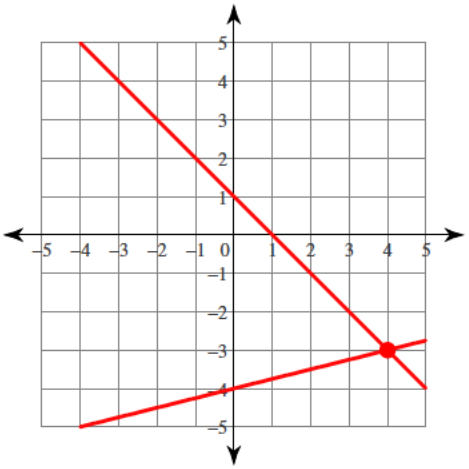
256) $-\frac{1}{2}x + \frac{1}{3}y = 1$
$x + 16 = -4y$



(–4, –3)

257) $-12y - 48 = -3x$

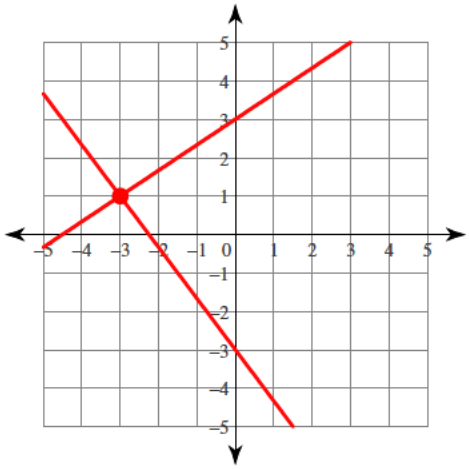
$y = -x + 1$



(4, –3)

258) $3 = -y - \frac{4}{3}x$

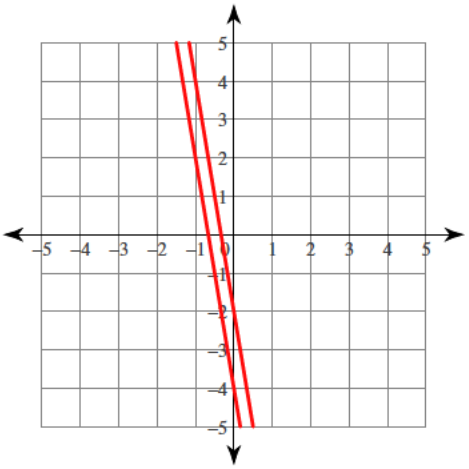
$-9 - 2x = -3y$



(–3, 1)

259) $-3 = 9x + \frac{3}{2}y$

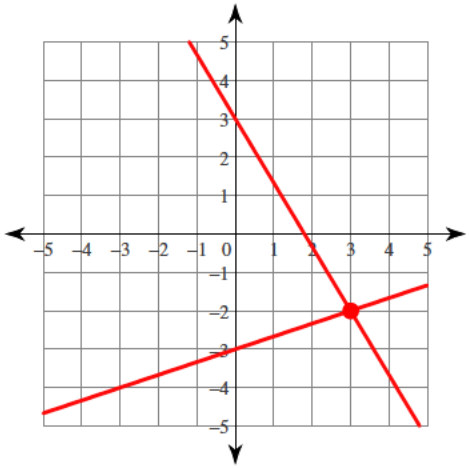
$4 = -y - 6x$



No solution

260) $-9 = 3y - x$

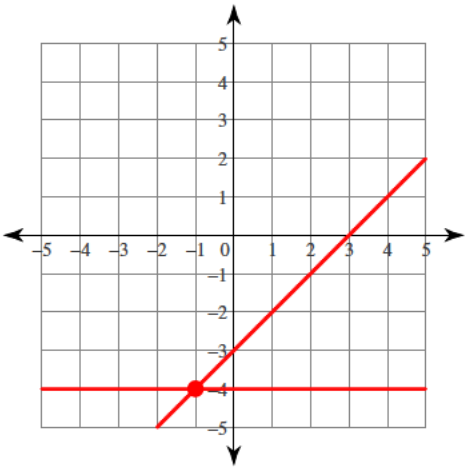
$15x - 27 = -9y$



(3, –2)

261) $0 = -3x + 3y + 9$

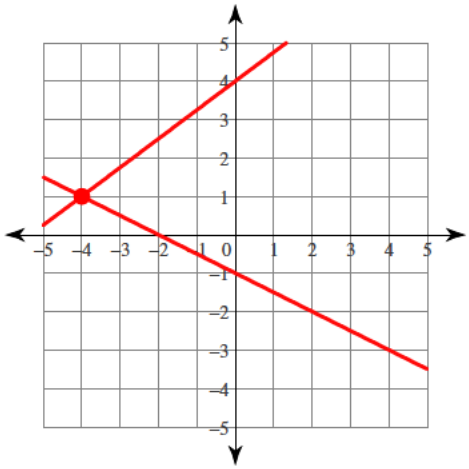
$-y = 4$



(–1, –4)

262) $0 = x + 2y + 2$

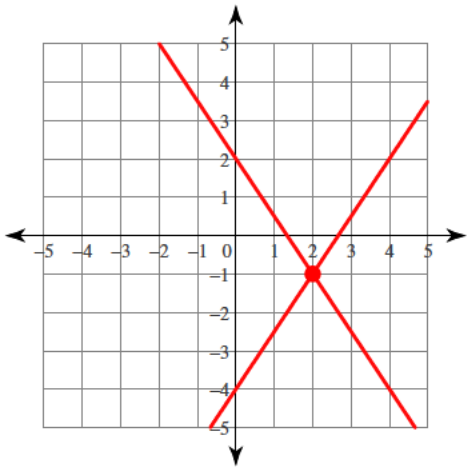
$-2y = -8 - \frac{3}{2}x$



(–4, 1)

263) $-16 = -6x + 4y$

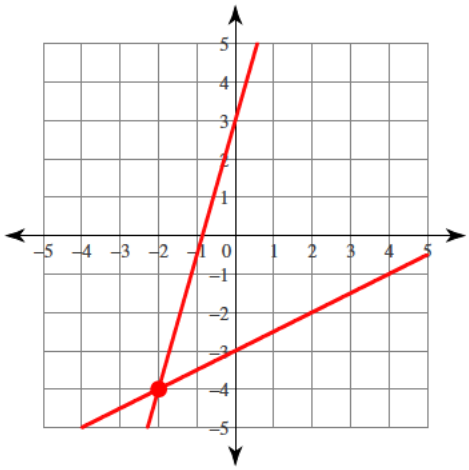
$y + \frac{3}{2}x = 2$



(2, –1)

264) $\frac{7}{2}x = y - 3$

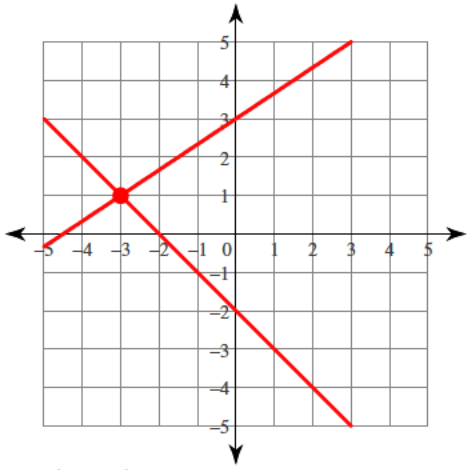
$2x = 4y + 12$



(–2, –4)

265) $3y = 9 + 2x$

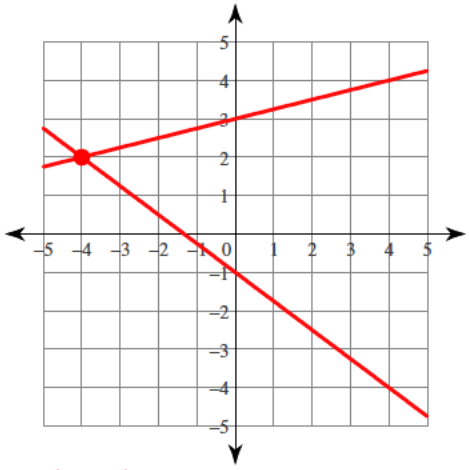
$-y = 2 + x$



(–3, 1)

266) $0 = -3x - 4 - 4y$

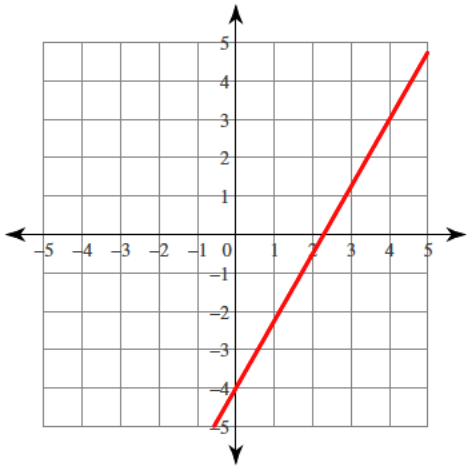
$-12 = x - 4y$



(–4, 2)

267) $14x - 8y = 32$

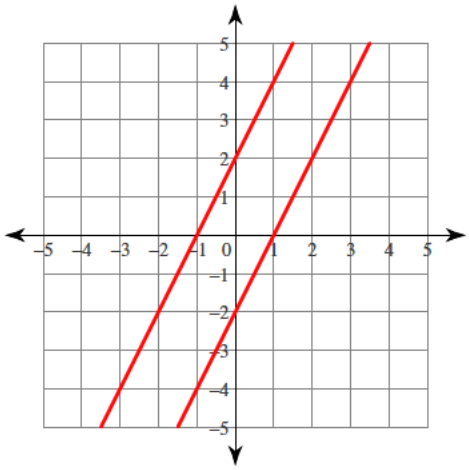
$-16 = -7x + 4y$



Infinite number of solutions

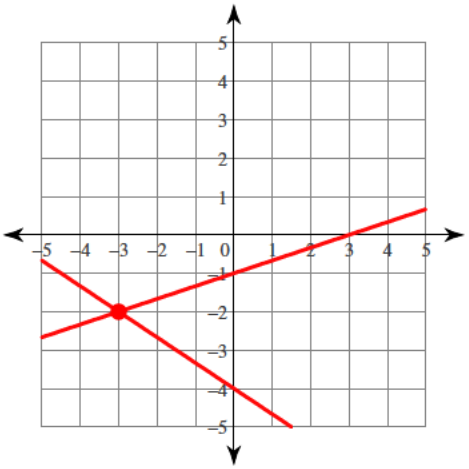
268) $x - \frac{1}{2}y = 1$

$-3y + 6x = -6$



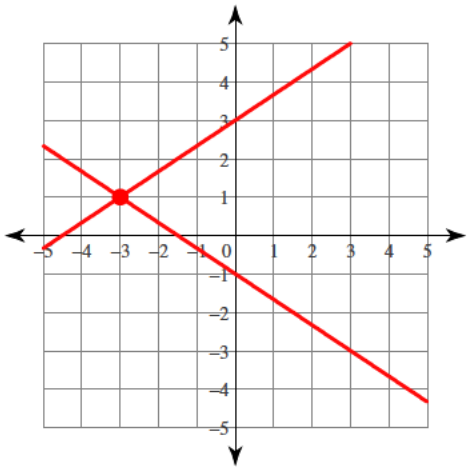
No solution

269) $-x = -3 - 3y$
$12 + 2x = -3y$



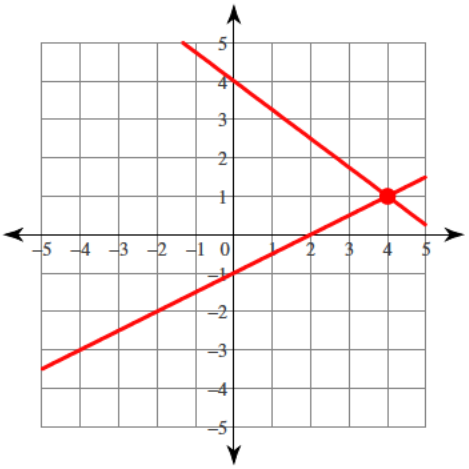
(–3, –2)

270) $-3y = 2x + 3$
$x - \frac{3}{2}y = -\frac{9}{2}$



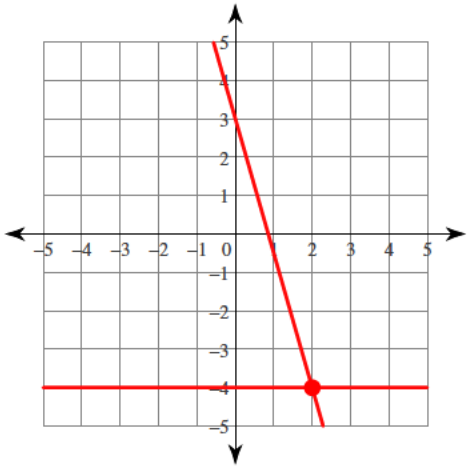
(–3, 1)

271) $\frac{4}{3}y = -x + \frac{16}{3}$
$2 = -2y + x$



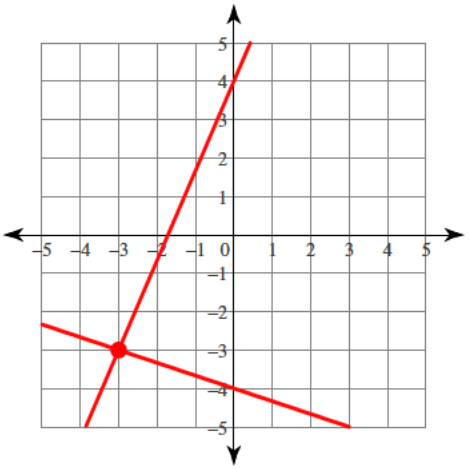
(4, 1)

272) $0 = 7x - 6 + 2y$
$4 = -y$



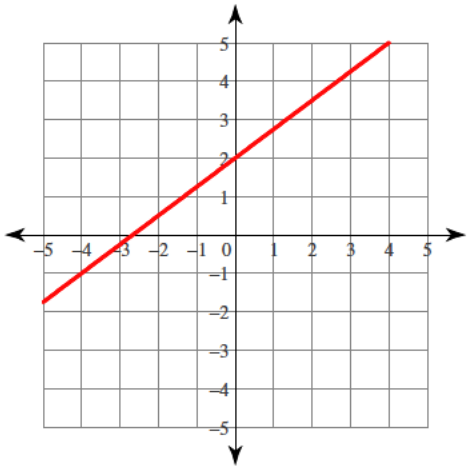
(2, –4)

273) $-x - 12 = 3y$
$-\frac{36}{7} + \frac{9}{7}y = 3x$



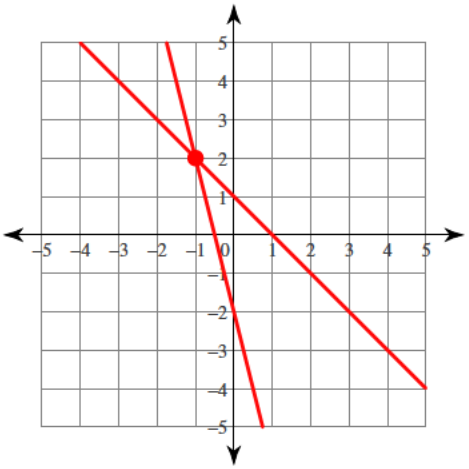
(–3, –3)

274) $0 = -x + \frac{4}{3}y - \frac{8}{3}$
$-6x = 16 - 8y$



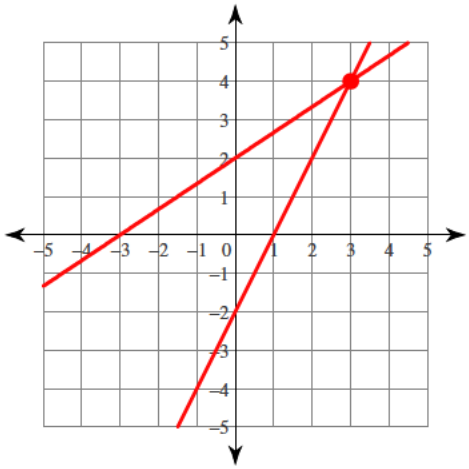
Infinite number of solutions

275) $y + x = 1$
$2 + y = -4x$



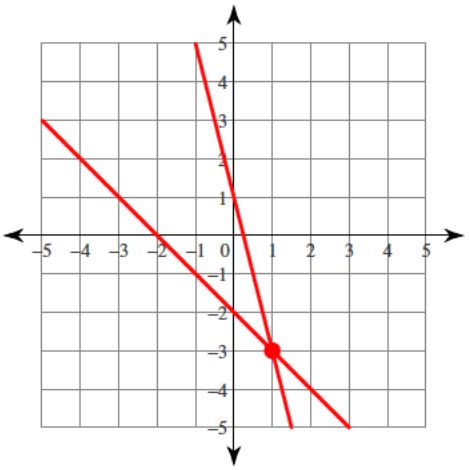
(–1, 2)

276) $3y = 6 + 2x$
$2y + 4 = 4x$



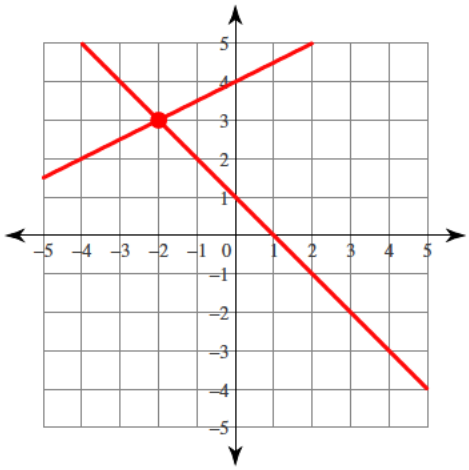
(3, 4)

277) $-4 - 2x = 2y$
$-1 + 4x = -y$



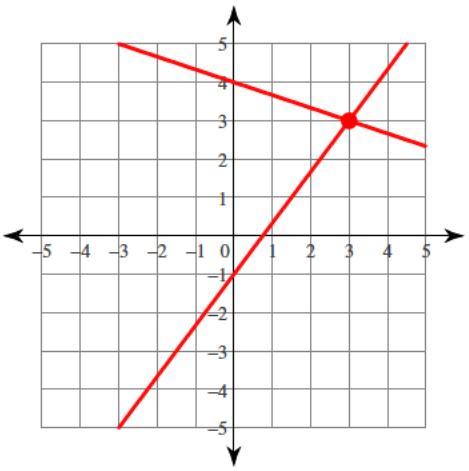
(1, –3)

278) $-8 = -2y + x$
$-1 + x = -y$



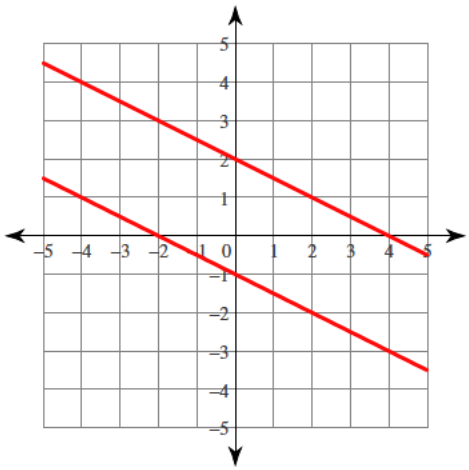
(–2, 3)

279) $3y = -x + 12$
$3y - 4x = -3$



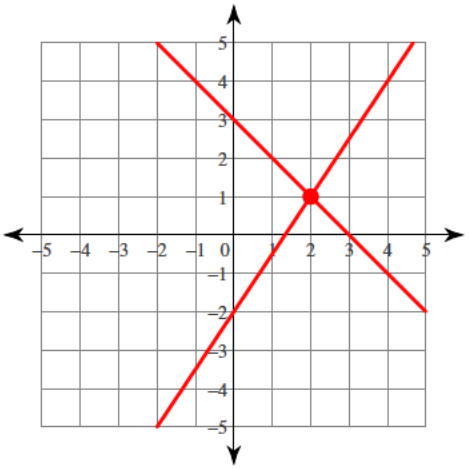
(3, 3)

280) $2y + 2 = -x$
$2y - 4 = -x$



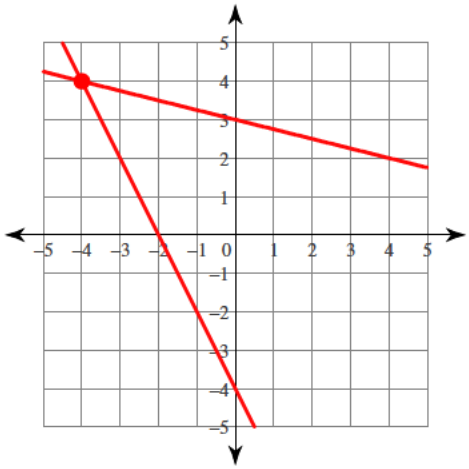
No solution

281) $2x = -2y + 6$
$-4 = -3x + 2y$



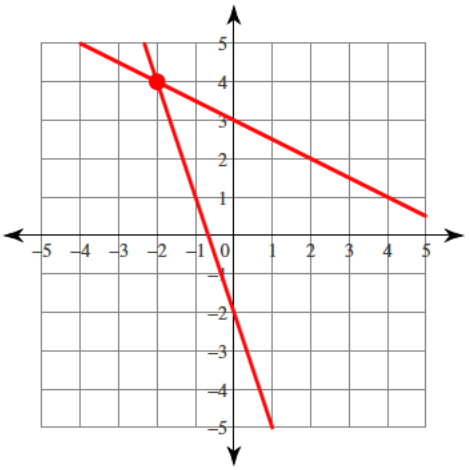
(2, 1)

282) $36 = 12y + 3x$
$-3y - 12 - 6x = 0$



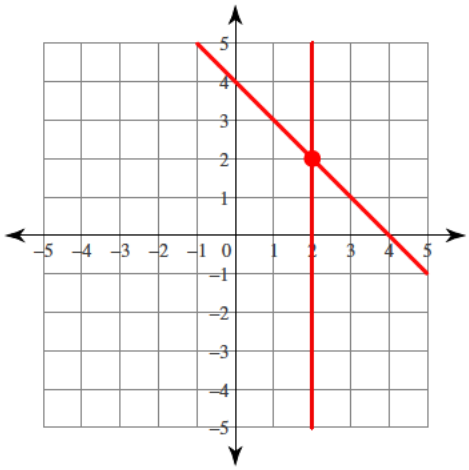
(–4, 4)

283) $2 + 3x = -y$
$-12 + 4y + 2x = 0$



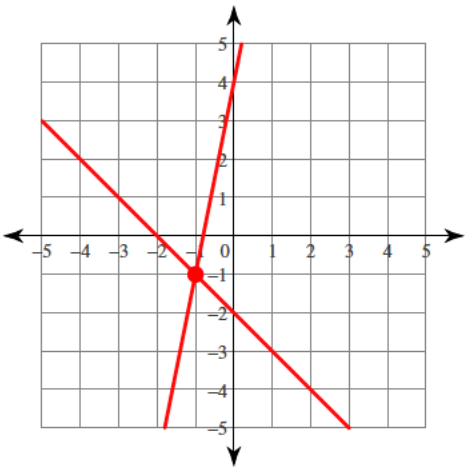
(–2, 4)

284) $y + x - 4 = 0$
$x - 2 = 0$



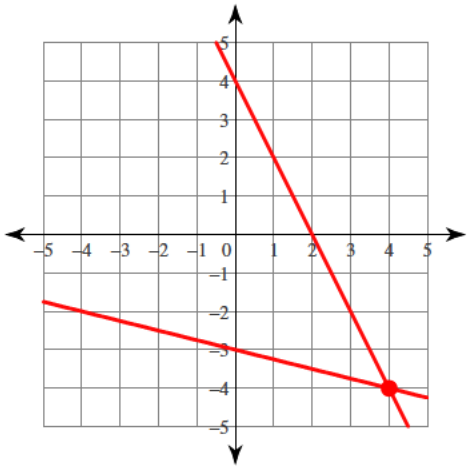
(2, 2)

285) $5x = y - 4$
$y = -x - 2$



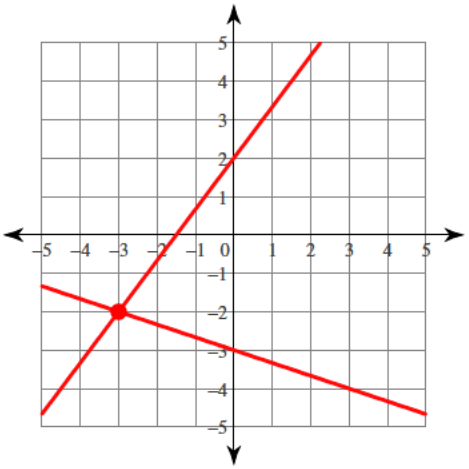
(–1, –1)

286) $y = -2x + 4$
$\frac{1}{12}x = -1 - \frac{1}{3}y$



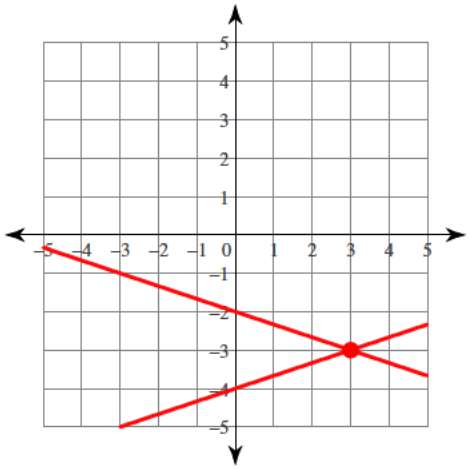
(4, –4)

287) $9 = -3y - x$
$-9y + 12x = -18$



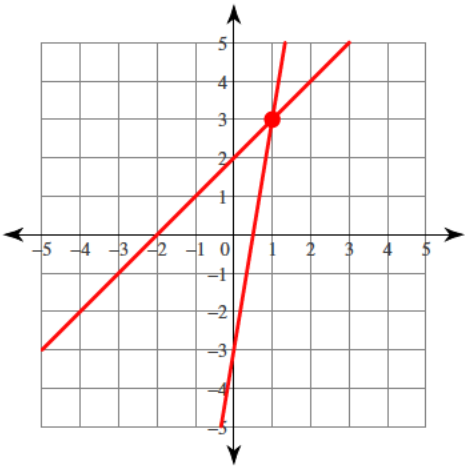
(–3, –2)

288) $6 + x = -3y$
$0 = -2x + 24 + 6y$



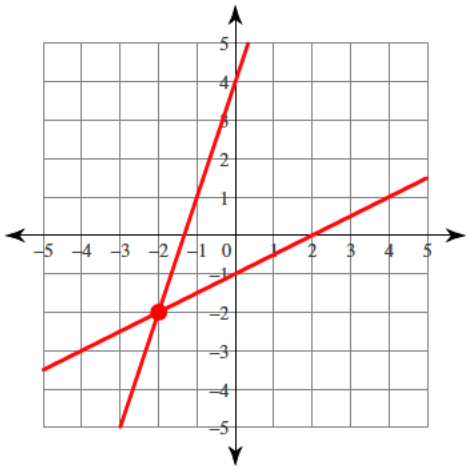
(3, –3)

289) $\frac{1}{2} = x - \frac{1}{6}y$
$-\frac{1}{2}y = -1 - \frac{1}{2}x$



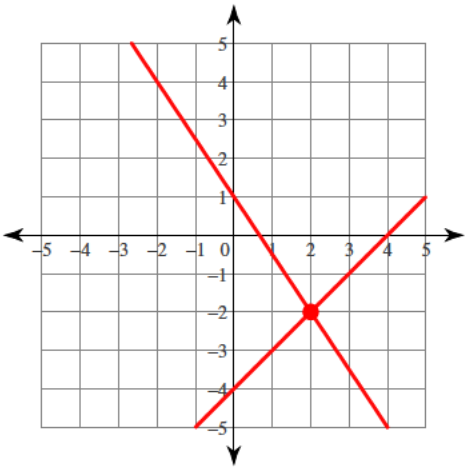
(1, 3)

290) $-2y = -x + 2$
$4 = -3x + y$



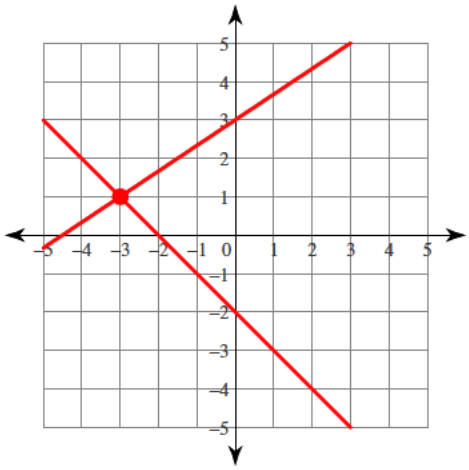
(–2, –2)

291) $3x = -2y + 2$
$-4 = y - x$



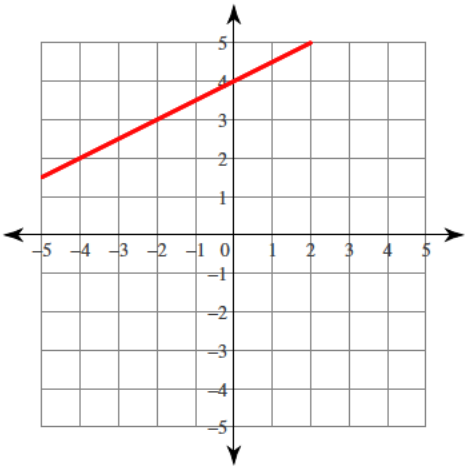
(2, –2)

292) $-y - 2 = x$
$2x - 3y = -9$



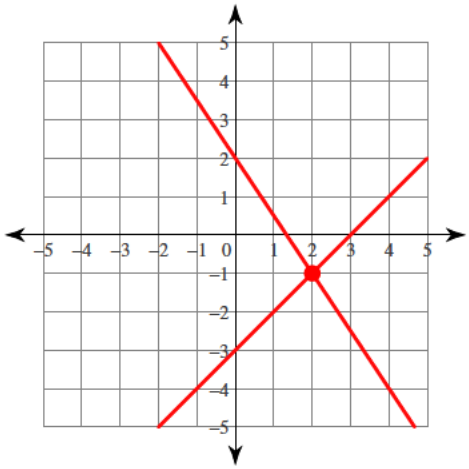
(–3, 1)

293) $16 - 4y = -2x$
$24 = -3x + 6y$



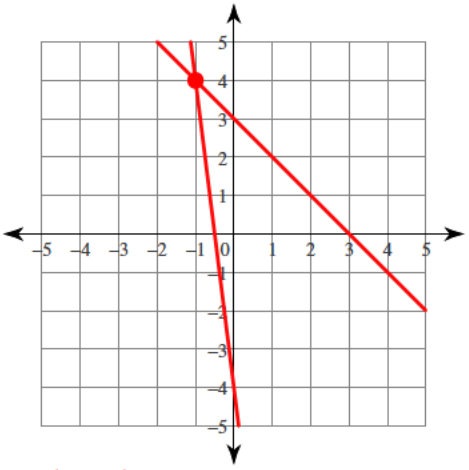
Infinite number of solutions

294) $4 - 3x - 2y = 0$
$3 - x = -y$



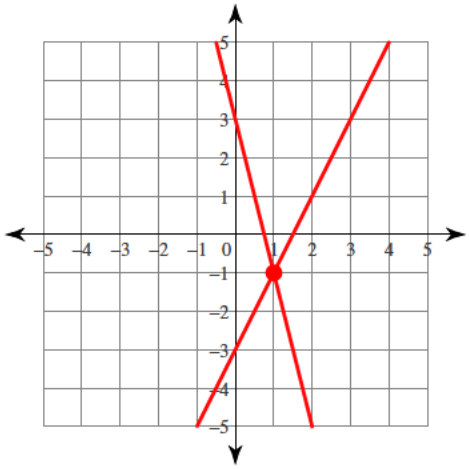
$(2, -1)$

295) $x = -y + 3$
$-\frac{3}{2} - \frac{3}{8}y = 3x$



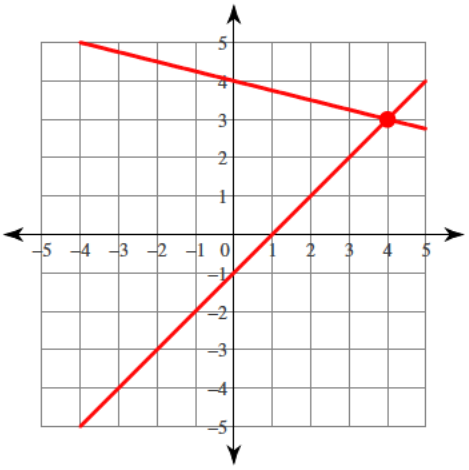
$(-1, 4)$

296) $2x = y + 3$
$-2y - 8x + 6 = 0$



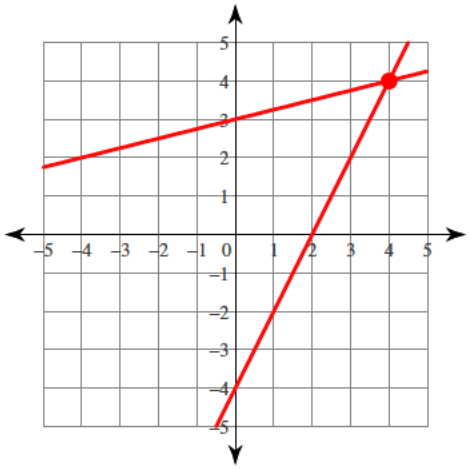
$(1, -1)$

297) $-x + 16 = 4y$
$-1 - y + x = 0$



$(4, 3)$

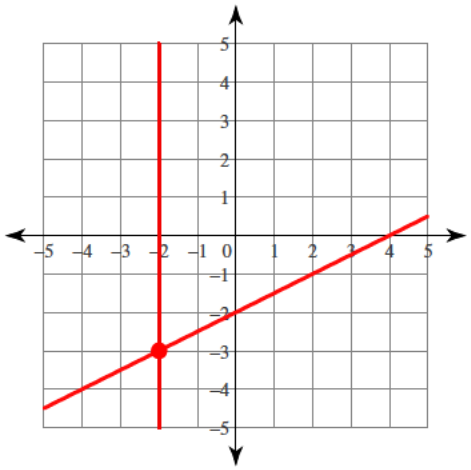
298) $-12y + 3x = -36$
$y + 4 - 2x = 0$



$(4, 4)$

299) $-y-2+\frac{1}{2}x=0$

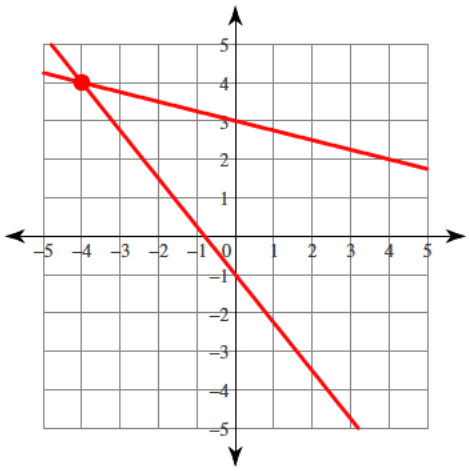
$2=-x$



(–2, –3)

300) $y+\frac{5}{4}x=-1$

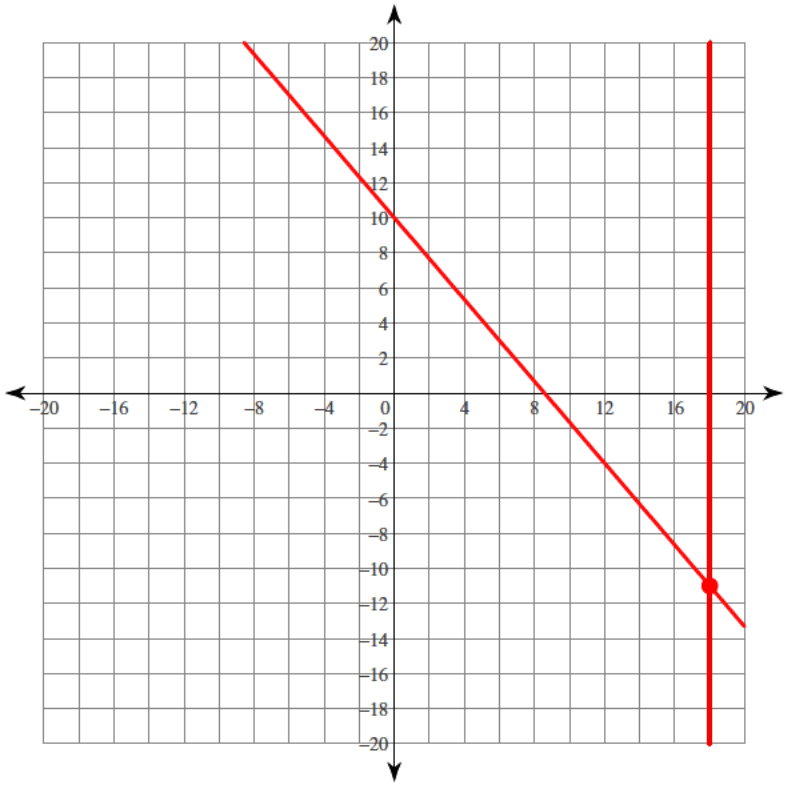
$0=1-\frac{1}{3}y-\frac{1}{12}x$



(–4, 4)

301) $18-x=0$

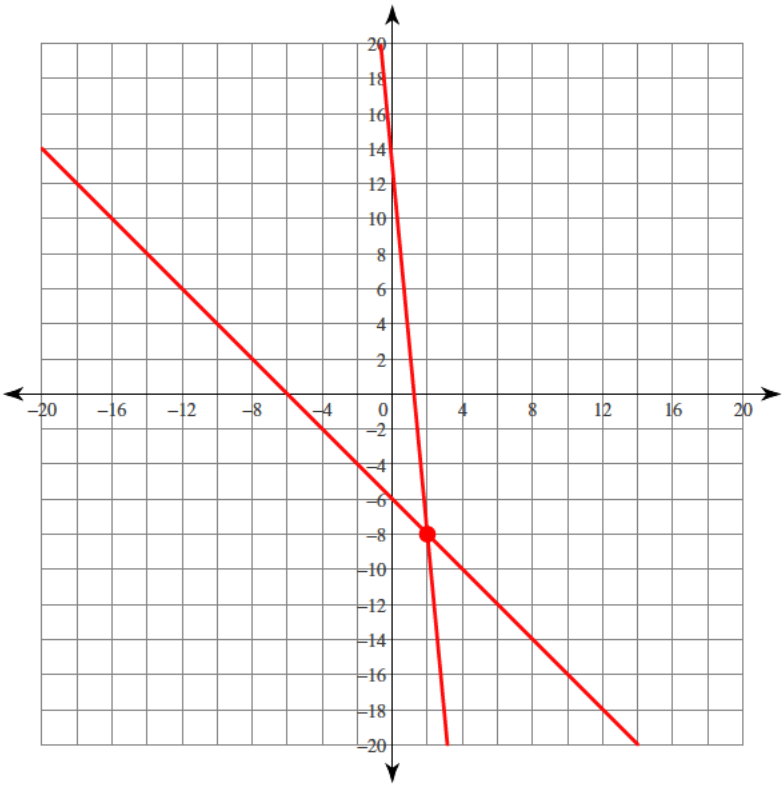
$60-6y=7x$



(18, –11)

302) $-21x + 26 - 2y = 0$

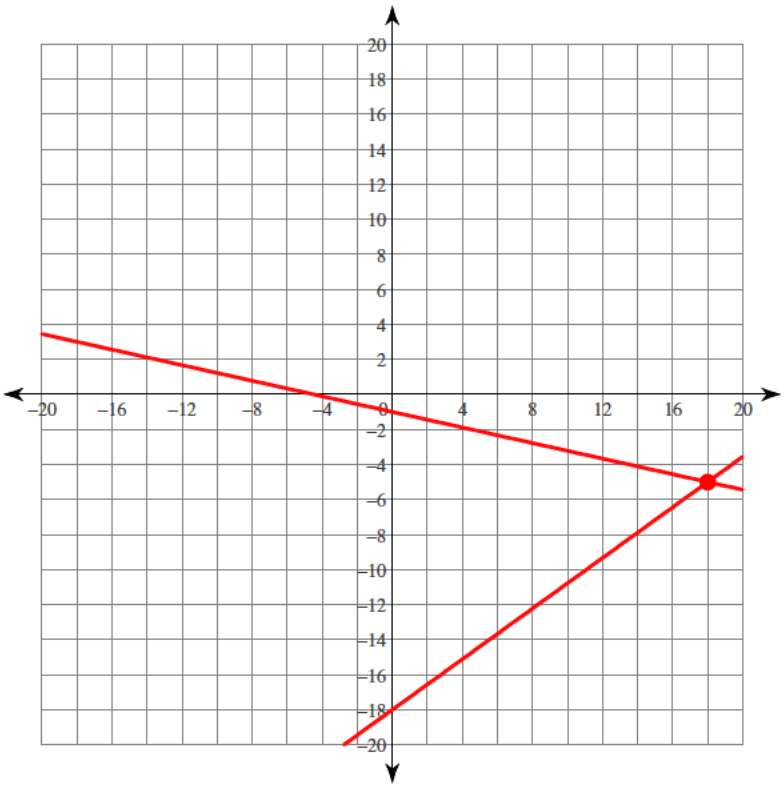
$-3 - \frac{1}{2}x - \frac{1}{2}y = 0$



(2, –8)

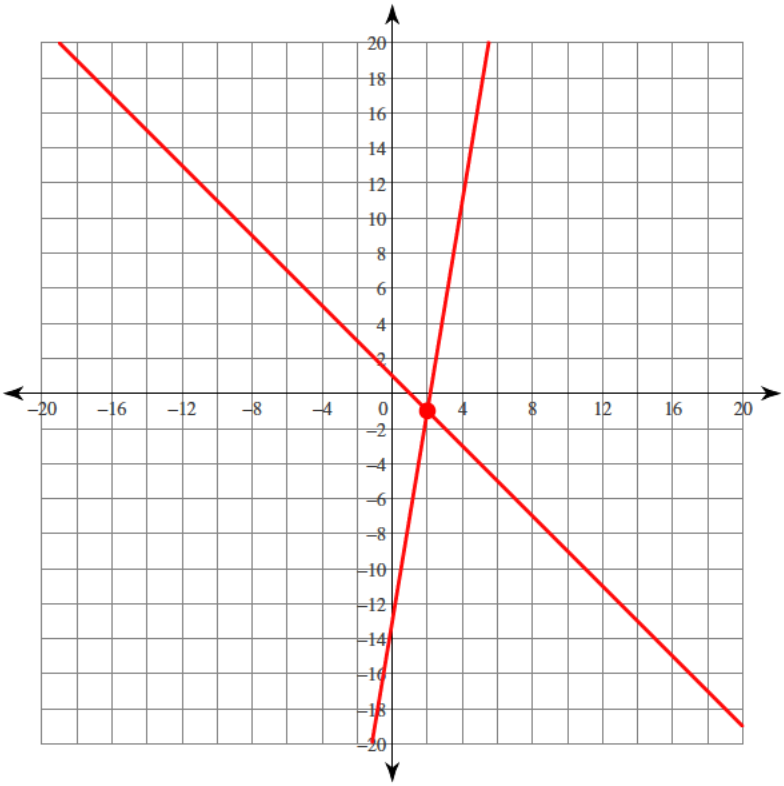
303) $39x = 972 + 54y$

$2x + 9y + 9 = 0$



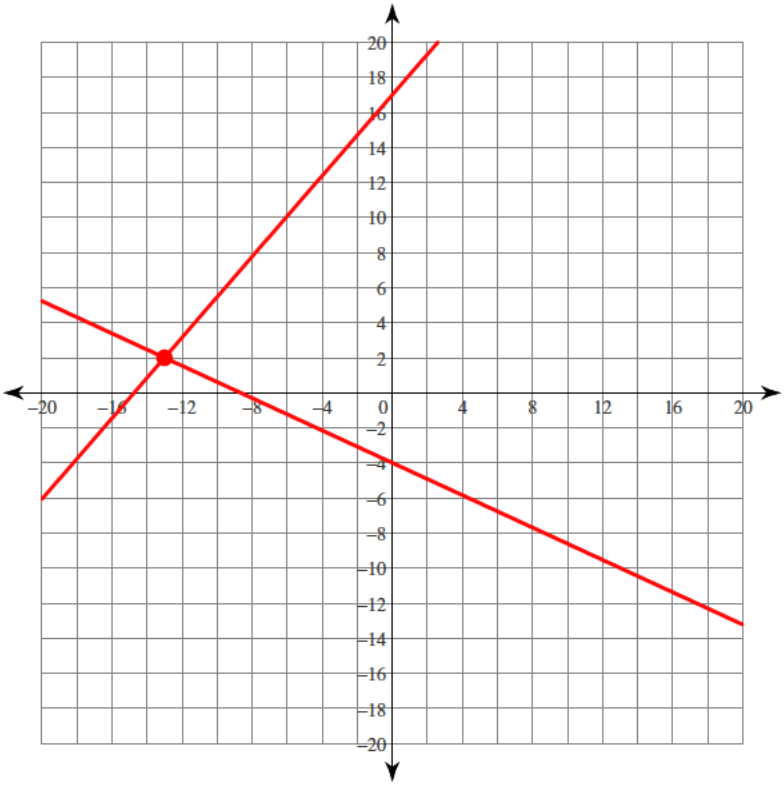
(18, –5)

304) $y = -x + 1$
$0 = y + 13 - 6x$



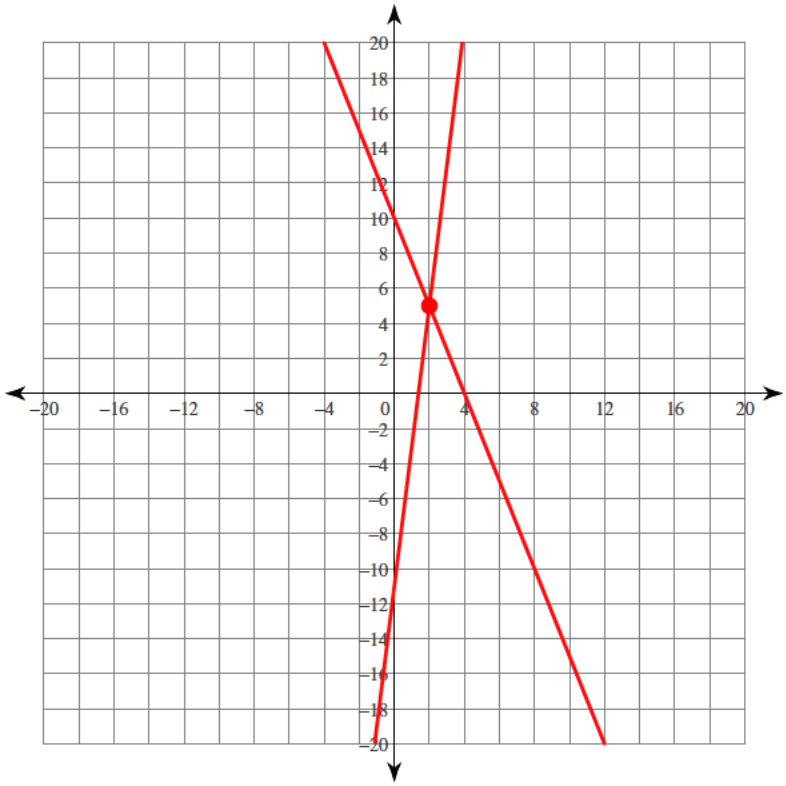
(2, –1)

305) $26y = -12x - 104$
$221 + 15x = 13y$



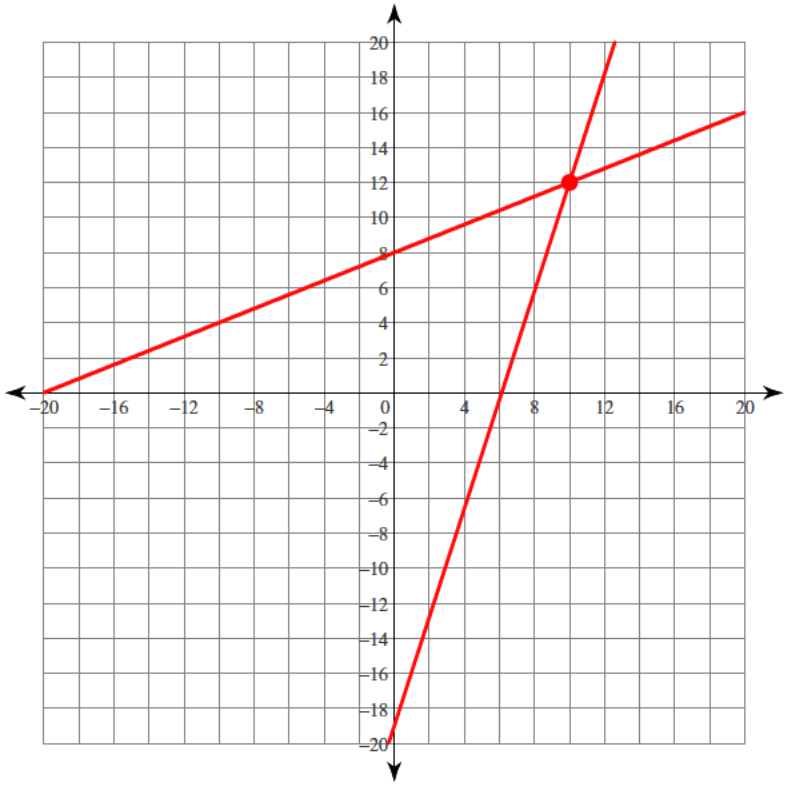
(–13, 2)

306) $20 - 2y = 5x$
$0 = y + 11 - 8x$



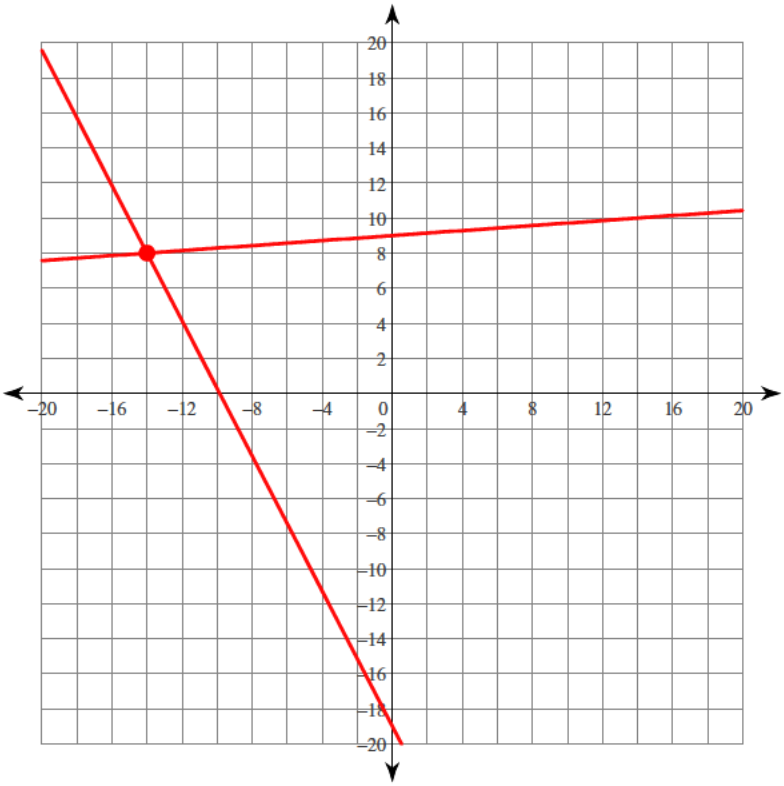
(2, 5)

307) $-31x = -190 - 10y$
$-5y + 40 = -2x$



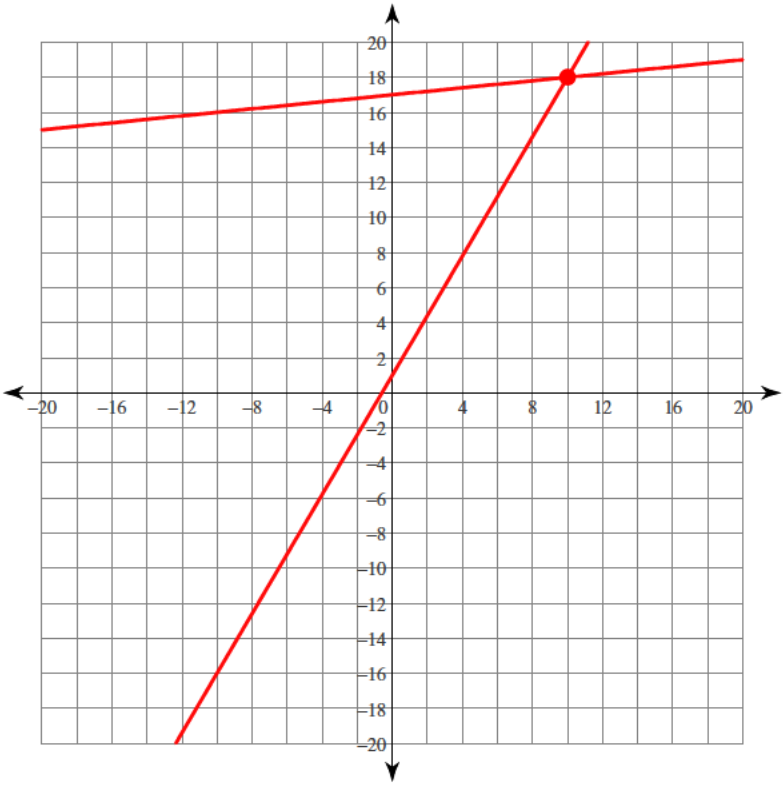
(10, 12)

308) $126 - 14y = -x$
$0 = 28y + 54x + 532$



(–14, 8)

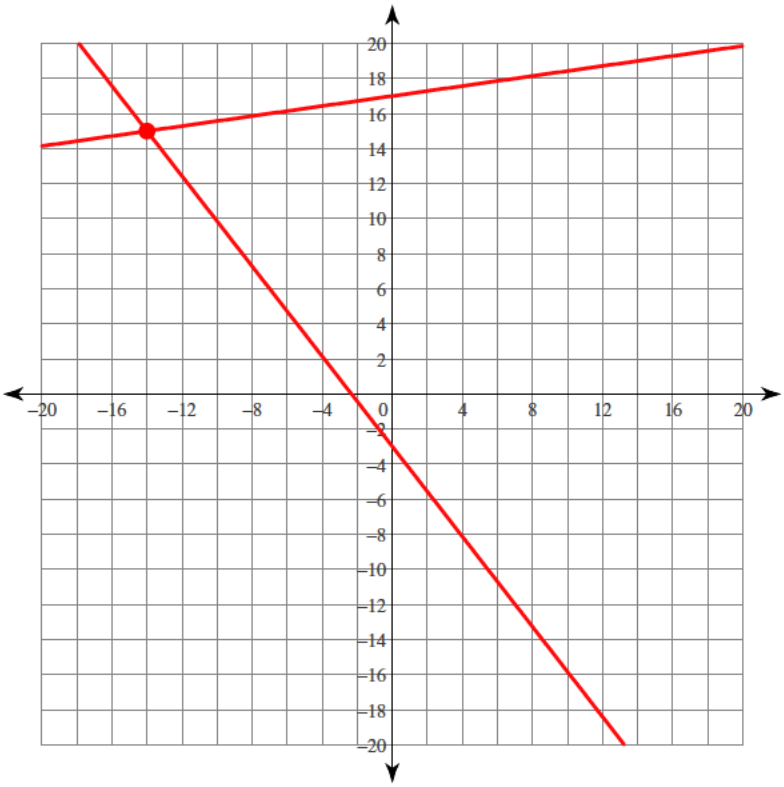
309) $-x = 170 - 10y$
$-10y = -17x - 10$



(10, 18)

310) $0 = 3 + \frac{3}{119}x - \frac{3}{17}y$

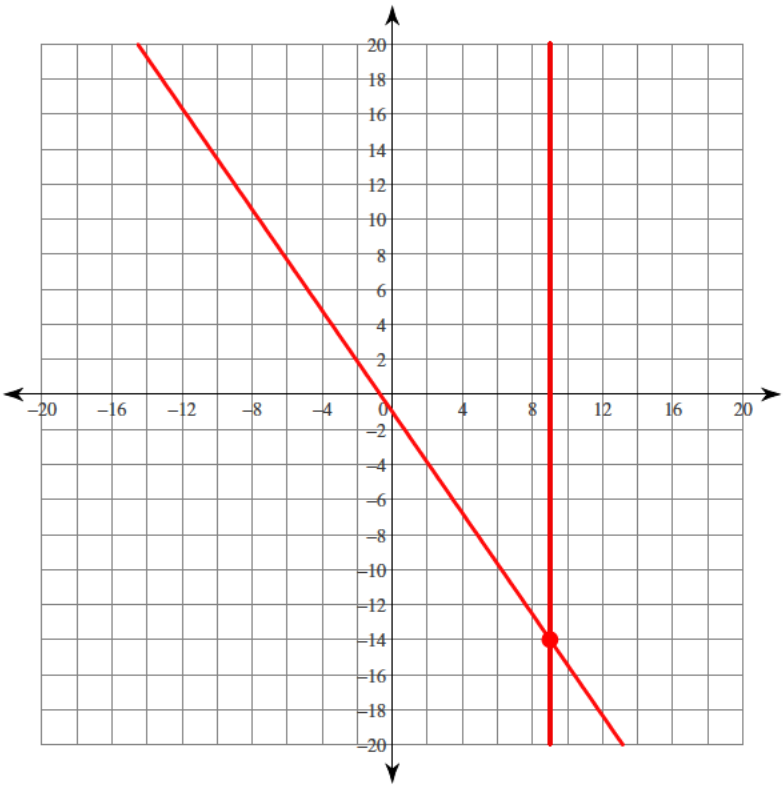
$0 = -7y - 9x - 21$



(–14, 15)

311) $13x = -9 - 9y$

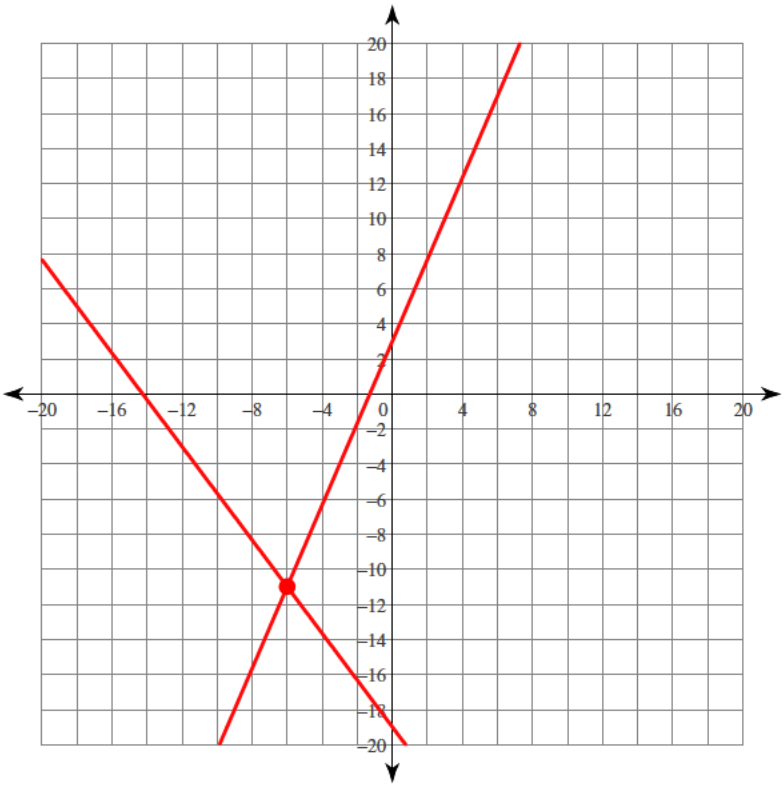
$x - 9 = 0$



(9, –14)

312) $9 + 7x = 3y$

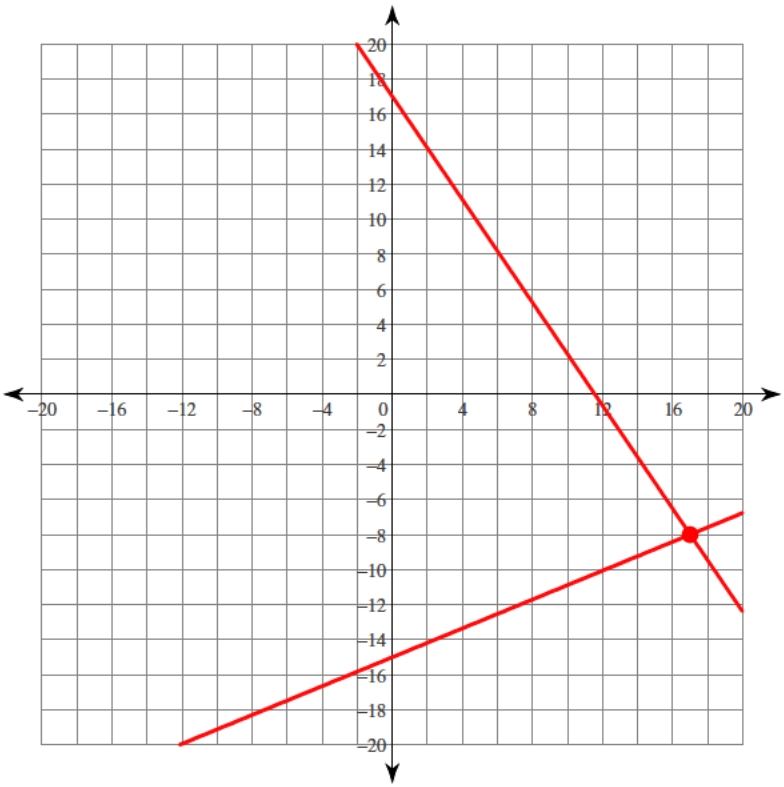
$-1 - \frac{1}{19}y = \frac{4}{57}x$



(–6, –11)

313) $867 = 75x + 51y$

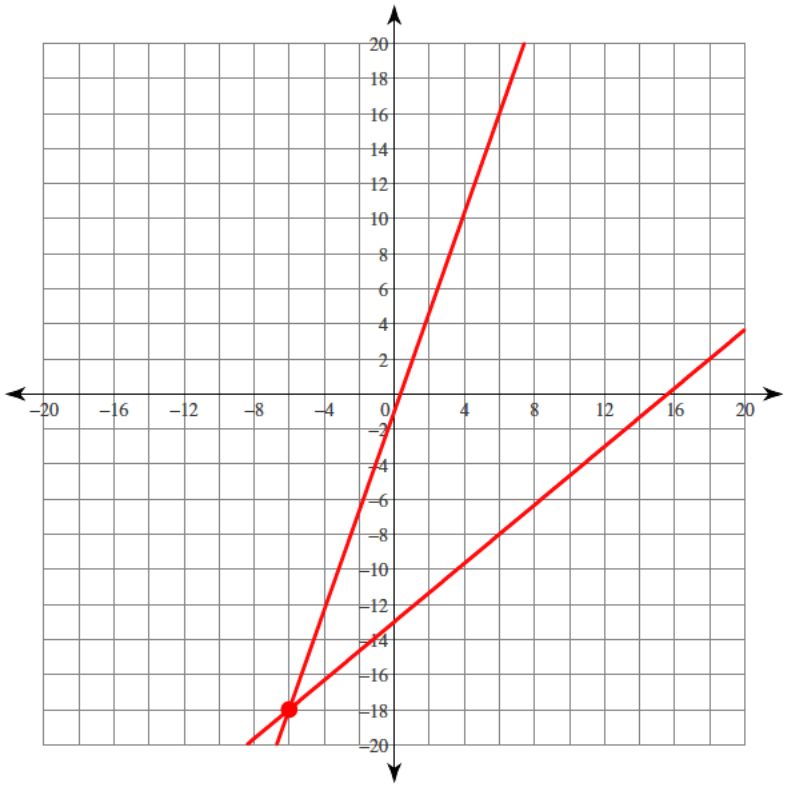
$-17y - 255 = -7x$



(17, –8)

314) $-\frac{5}{78}x+\frac{1}{13}y=-1$

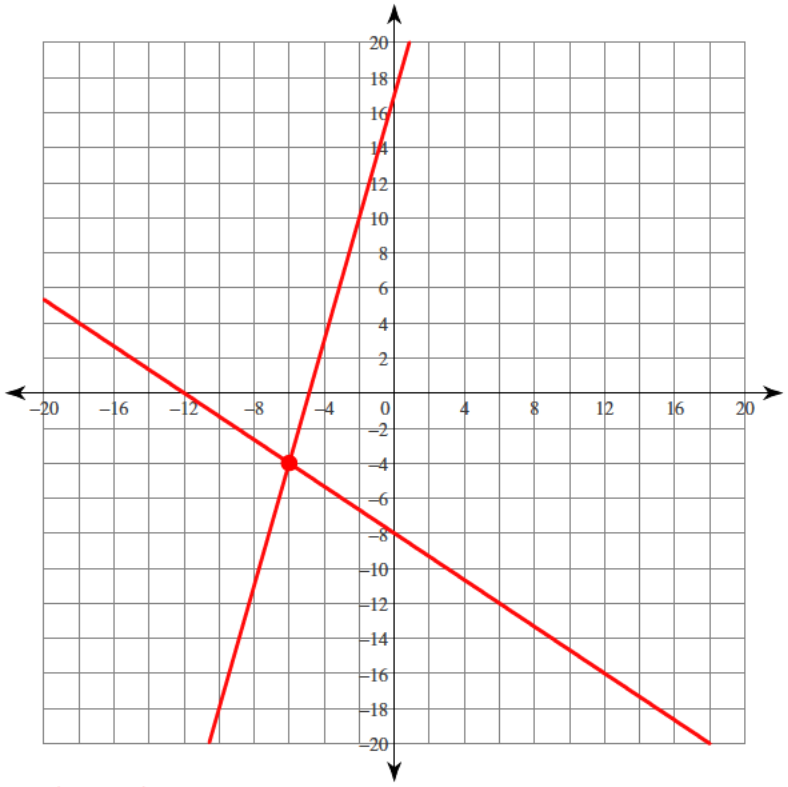
$6+6y=17x$



(–6, –18)

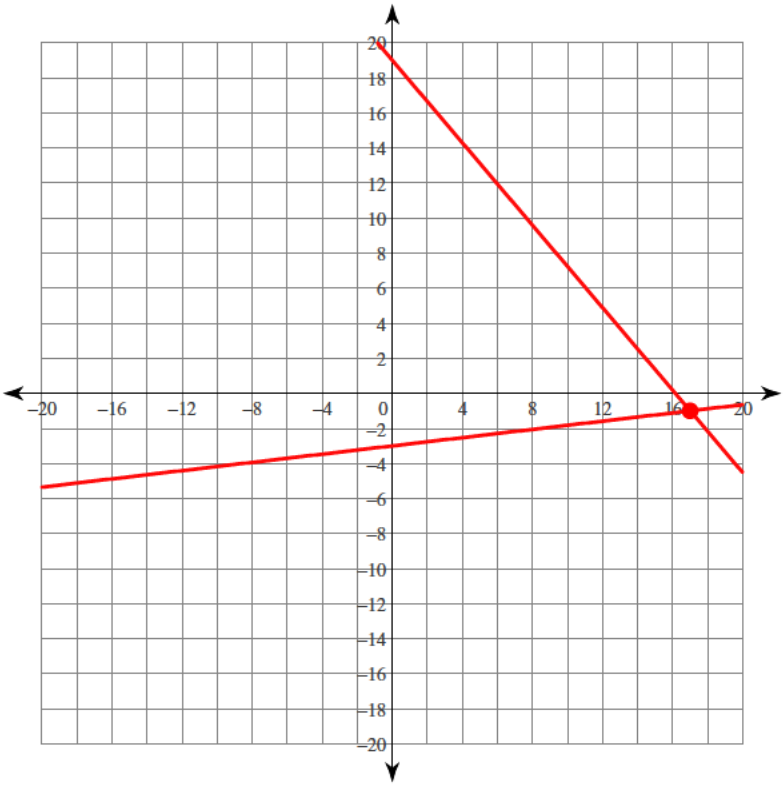
315) $-34+2y=7x$

$-1=\frac{1}{8}y+\frac{1}{12}x$



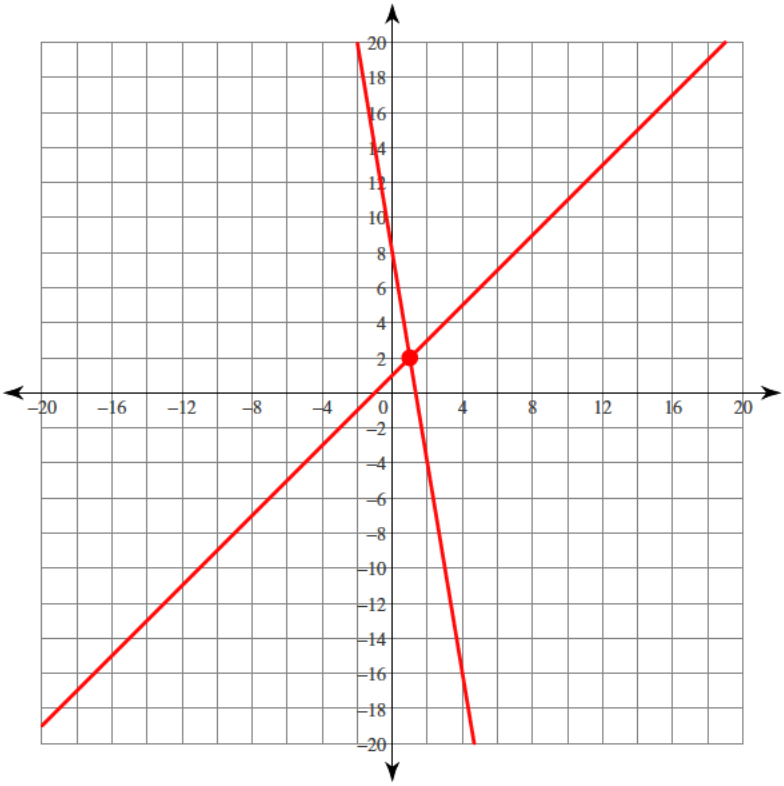
(–6, –4)

316) $-51 = 17y - 2x$
$-646 + 40x = -34y$



$(17, -1)$

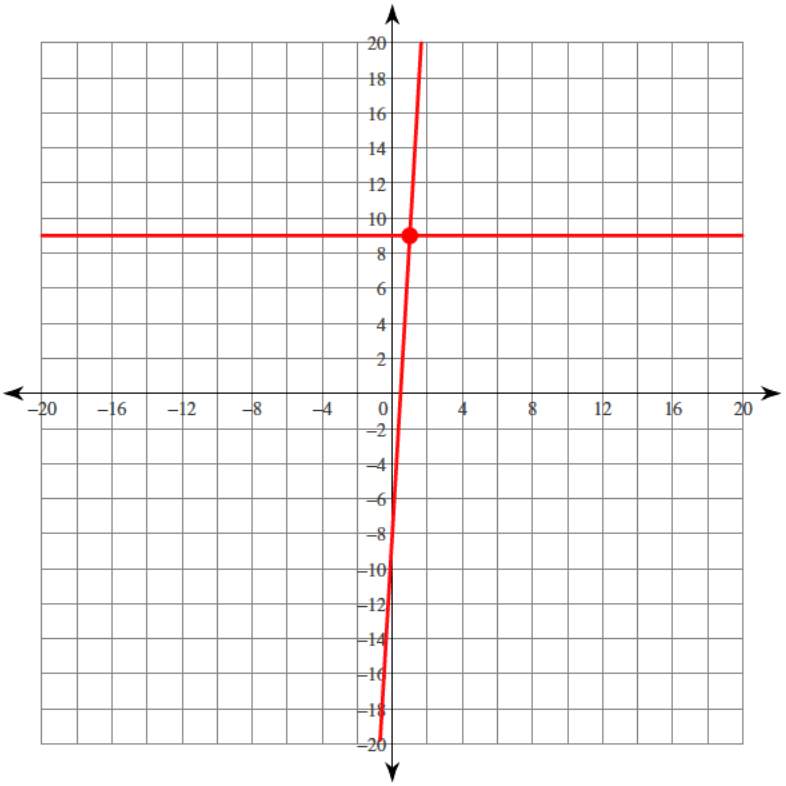
317) $-8 + 6x = -y$
$-1 - x + y = 0$



$(1, 2)$

318) $8 = -y + 17x$

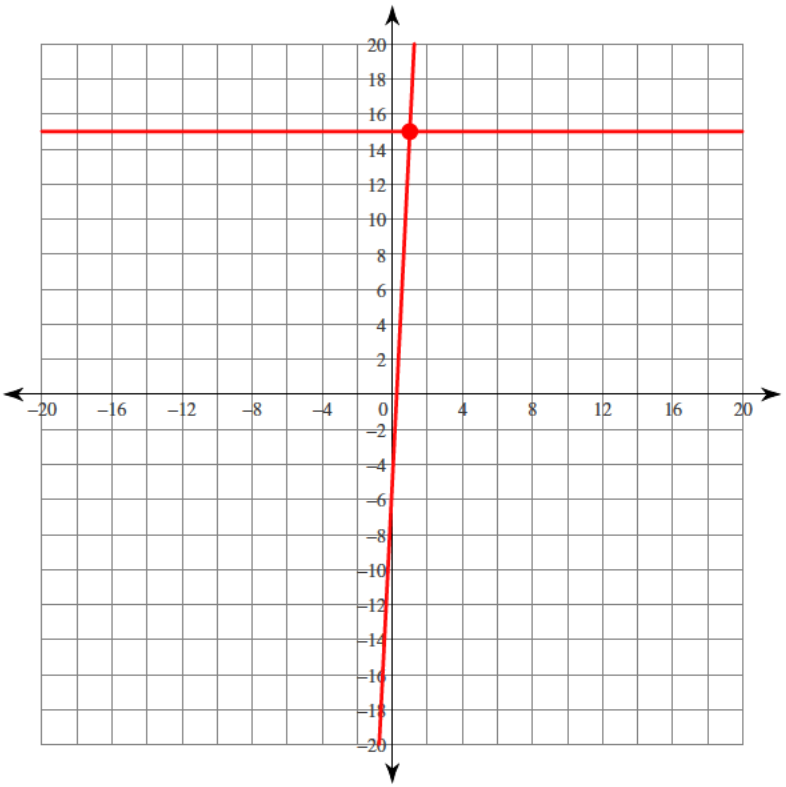
$0 = -y + 9$



(1, 9)

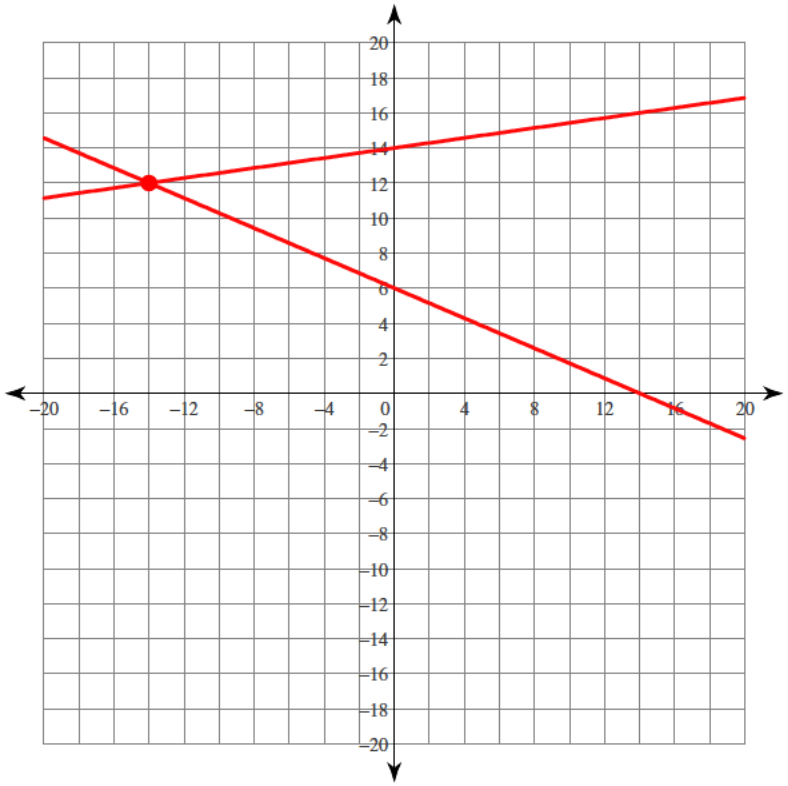
319) $0 = -5 - y + 20x$

$\frac{1}{15}y = 1$



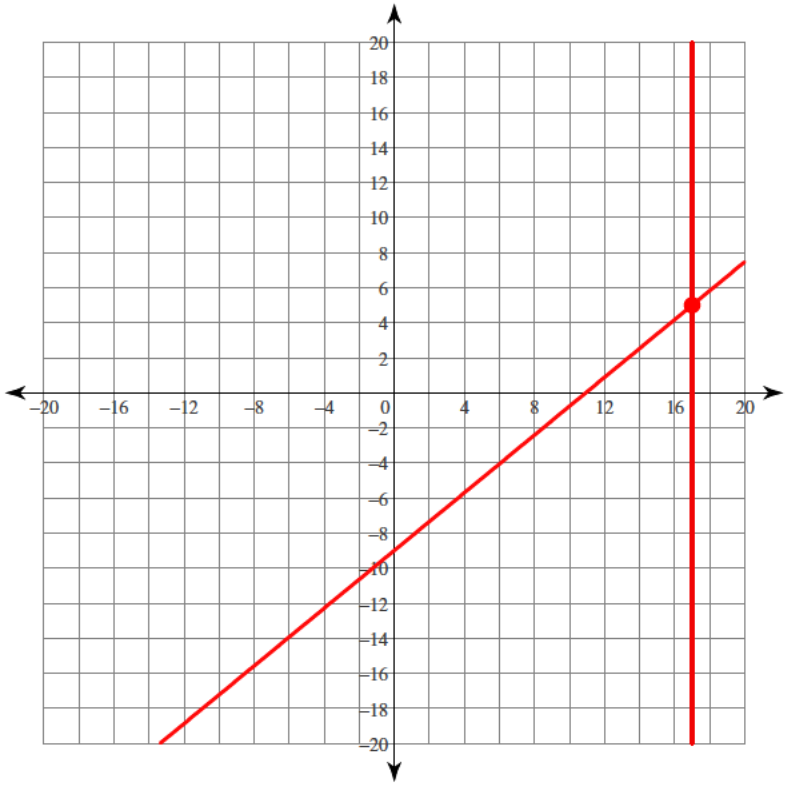
(1, 15)

320) $-42 + 7y = -3x$
$-x + 7y = 98$



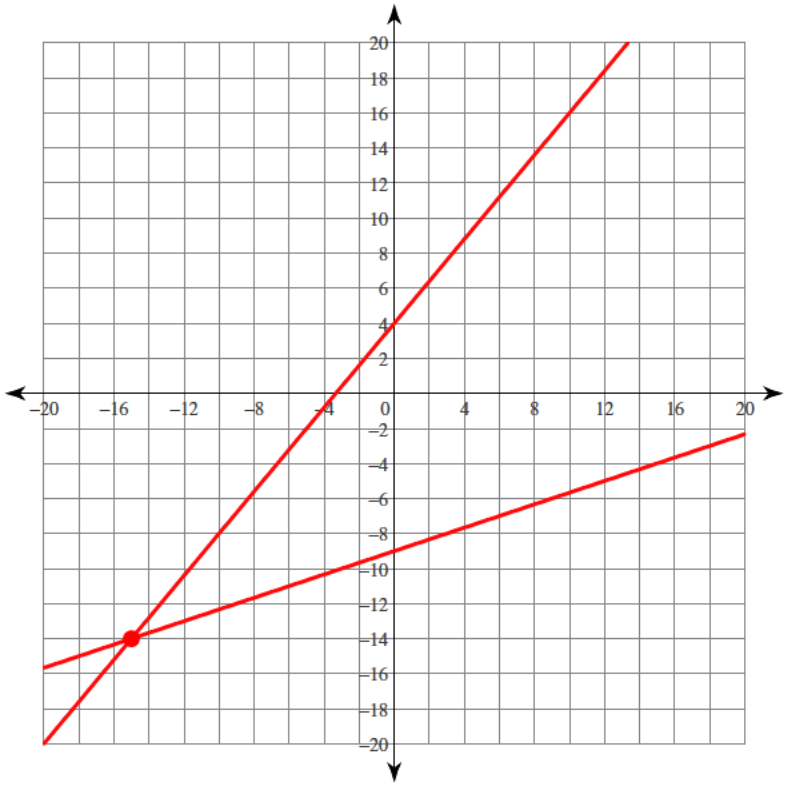
$(-14, 12)$

321) $-17 = -x$
$-153 = 17y - 14x$



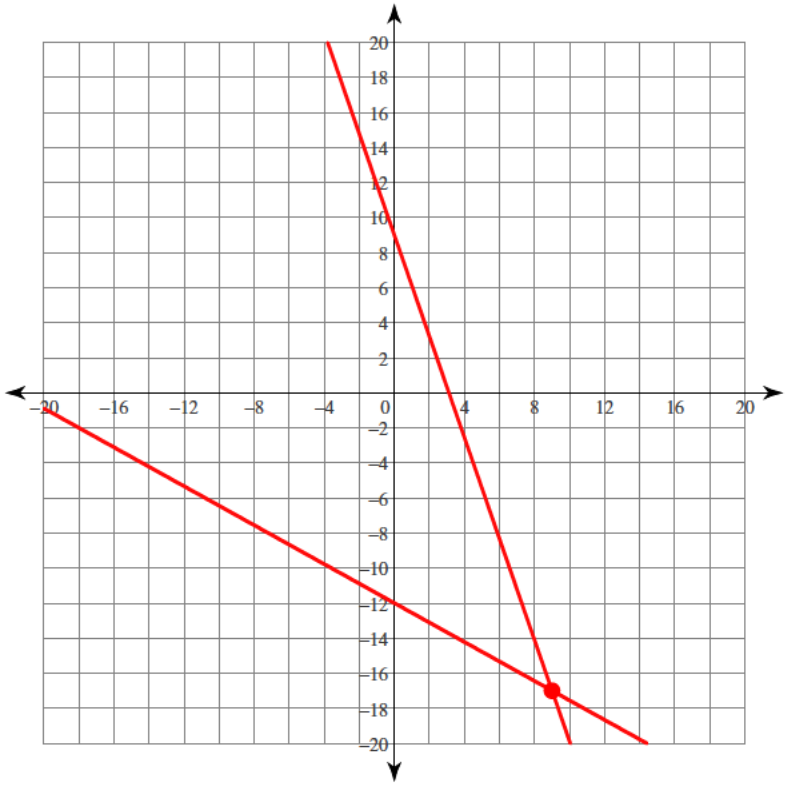
$(17, 5)$

322) $-6x = -5y + 20$
$x = 27 + 3y$



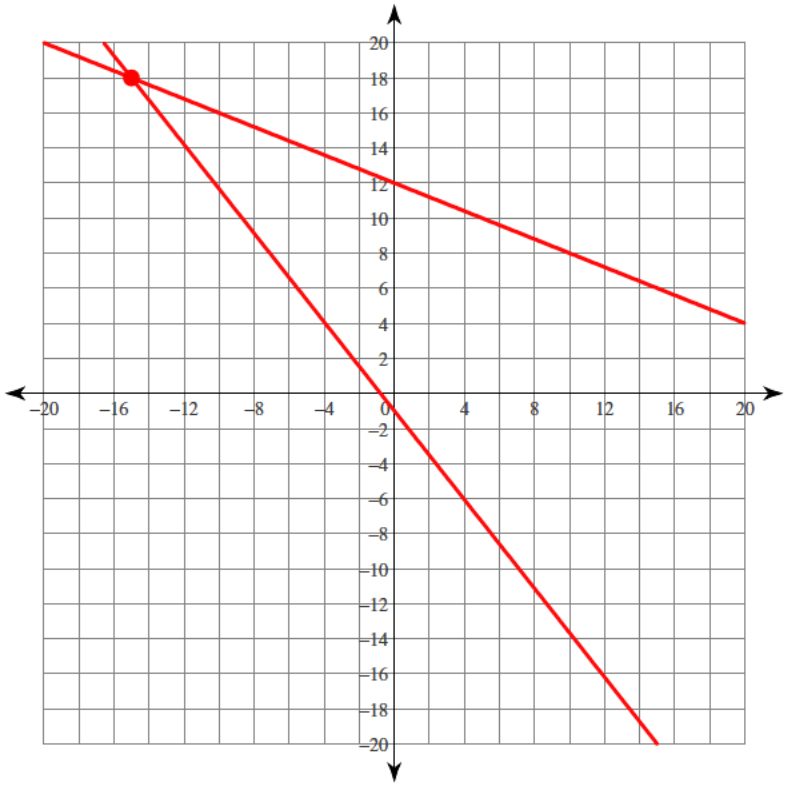
$(-15, -14)$

323) $27y = -324 - 15x$
$-81 = -9y - 26x$



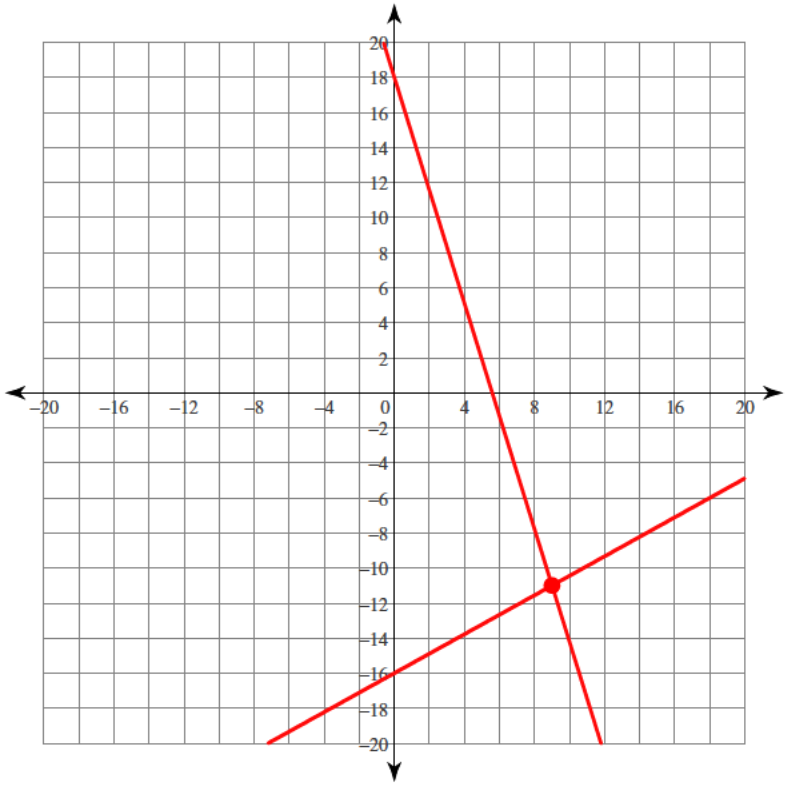
$(9, -17)$

324) $-60 + 2x + 5y = 0$
$-15 - 15y = 19x$



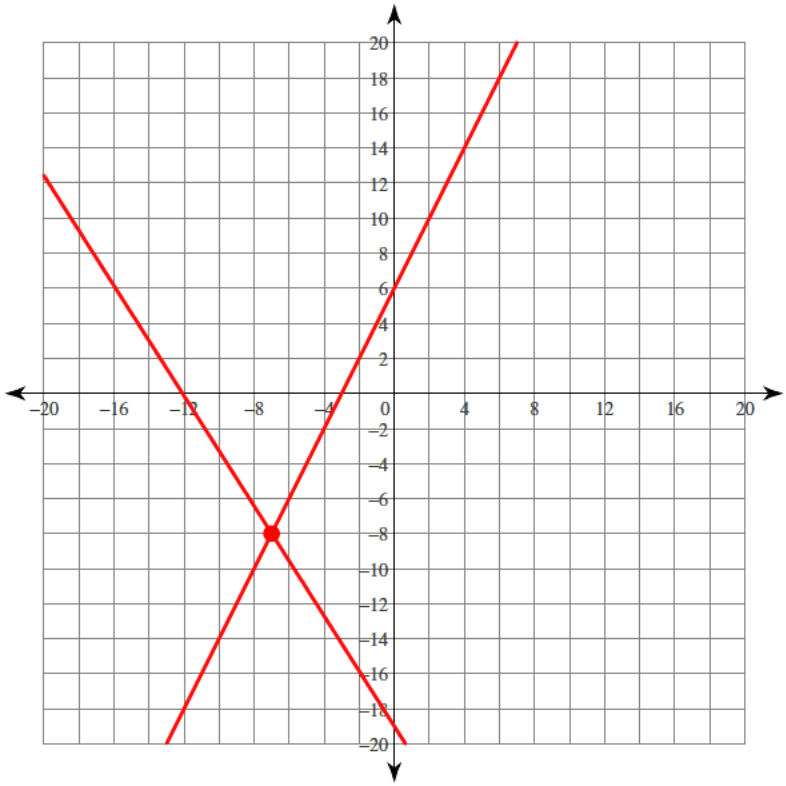
$(-15, 18)$

325) $9y = 5x - 144$
$29x - 162 + 9y = 0$



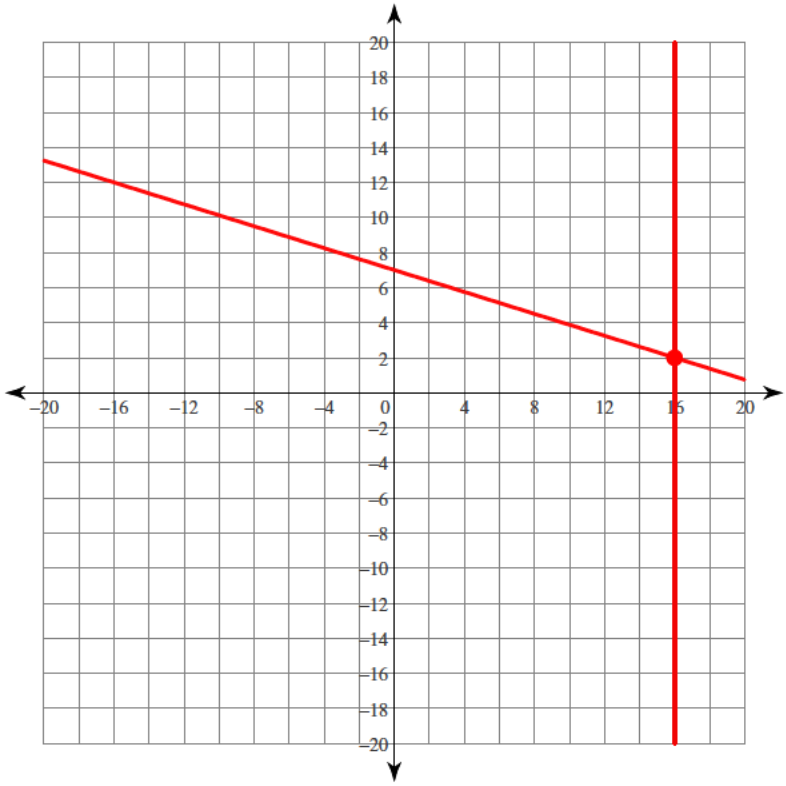
$(9, -11)$

326) $0 = -133 - 11x - 7y$
$-18 + 3y = 6x$



(–7, –8)

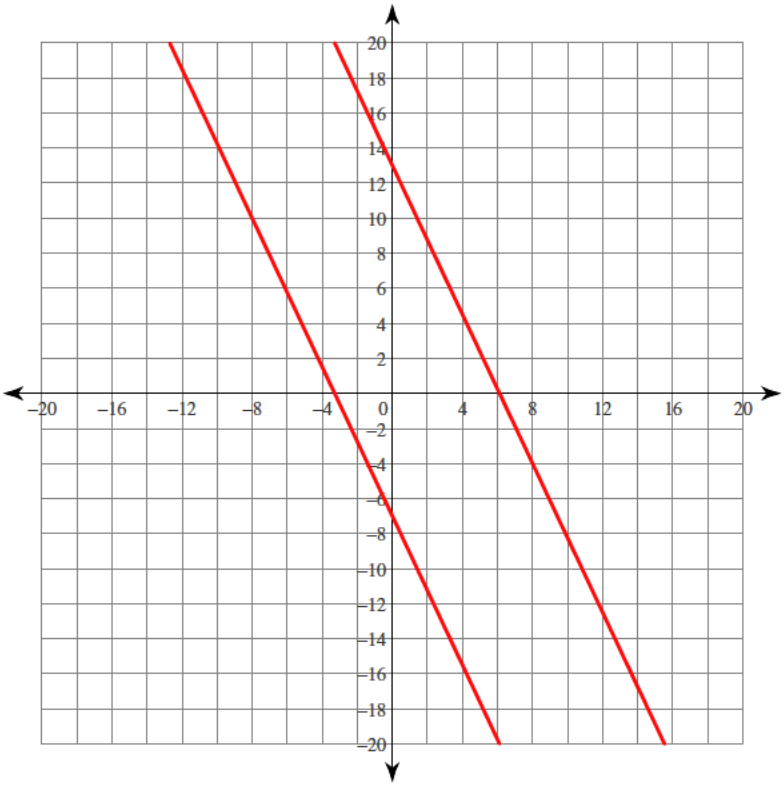
327) $-16 + x = 0$
$5x = 112 - 16y$



(16, 2)

328) $8y = 104 - 17x$

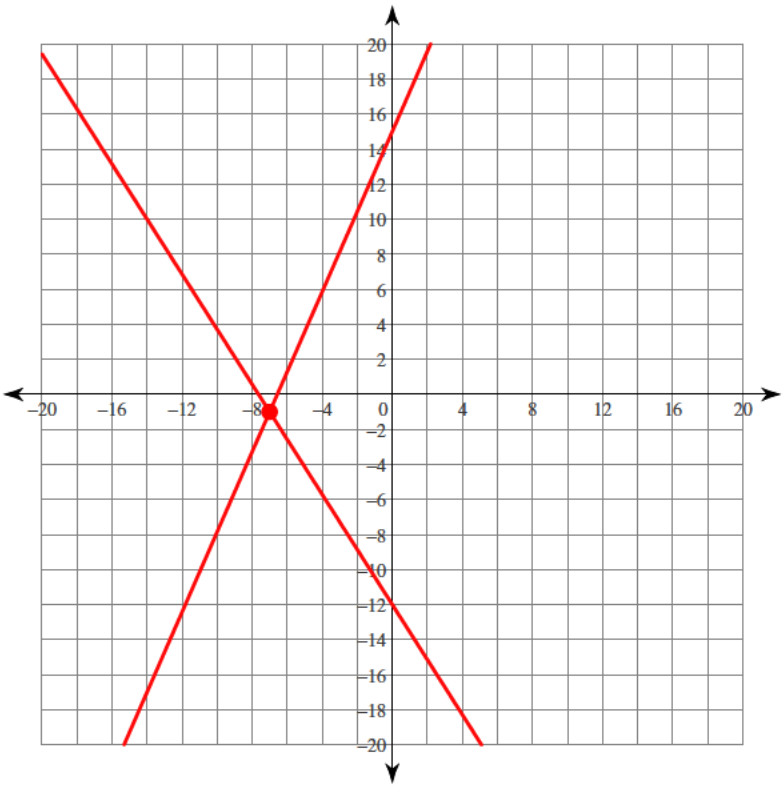
$0 = -8y - 56 - 17x$



No solution

329) $-\frac{7}{16}y + \frac{105}{16} = -x$

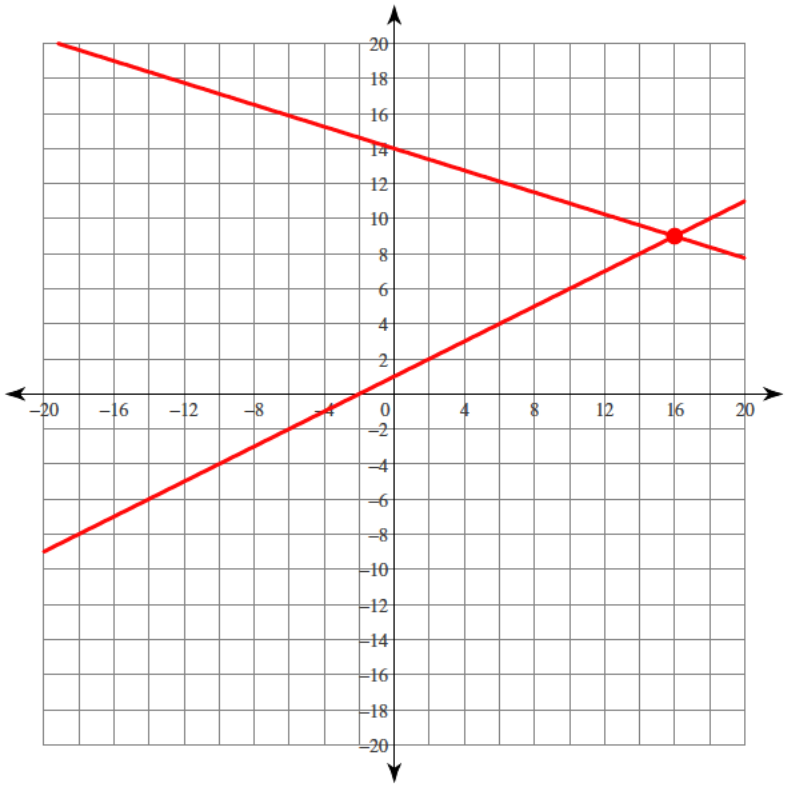
$84 = -11x - 7y$



$(-7, -1)$

330) $y - 1 = \frac{1}{2}x$

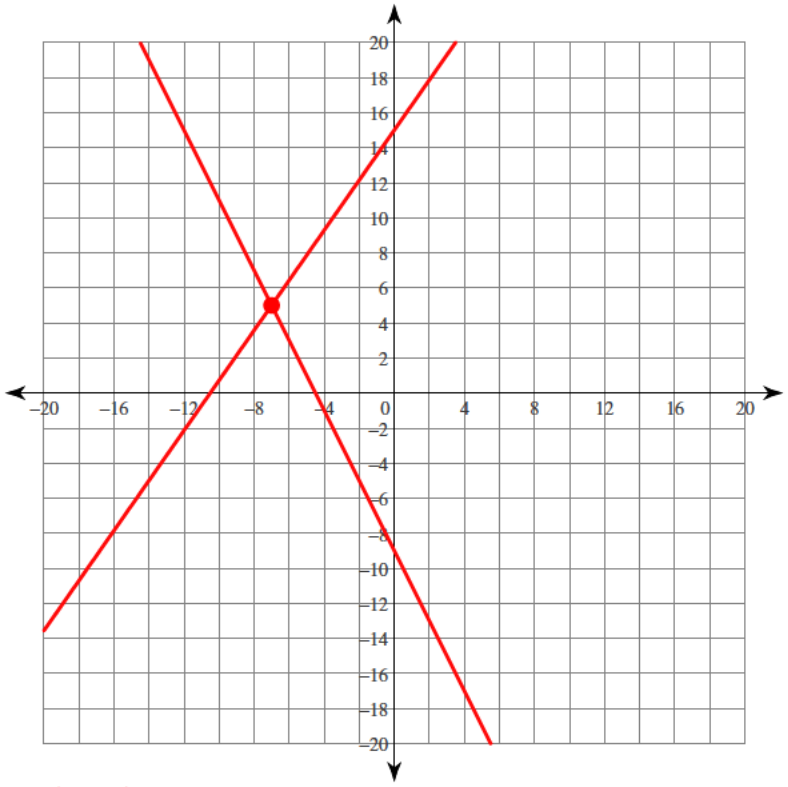
$-224 + 5x = -16y$



(16, 9)

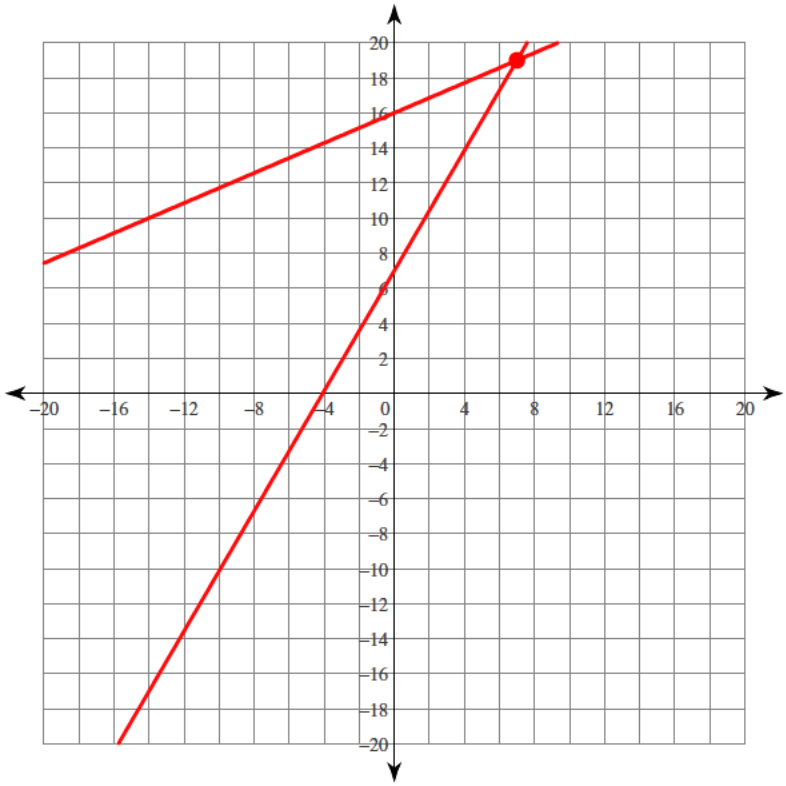
331) $-\frac{21}{2} + \frac{7}{10}y = x$

$2x + y = -9$



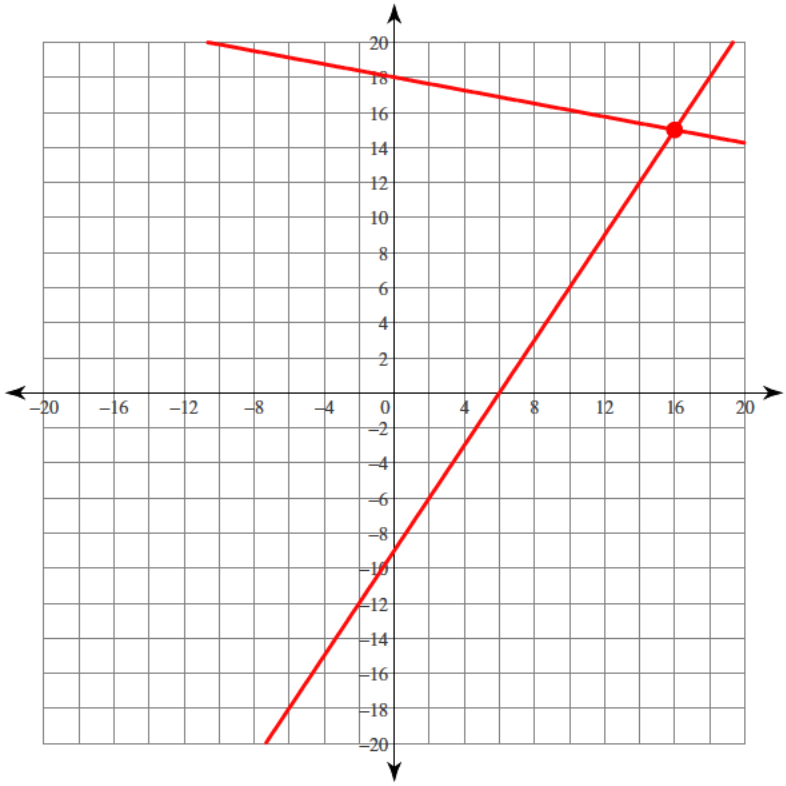
(–7, 5)

332) $-336 + 21y - 9x = 0$
$7y - 49 = 12x$



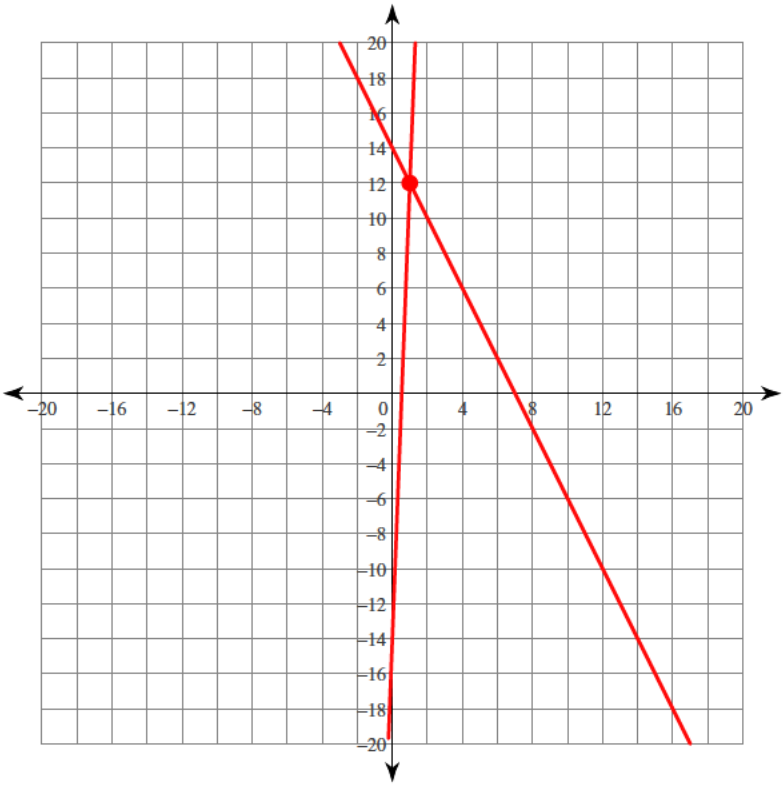
(7, 19)

333) $-36 = -6x + 4y$
$-3x - 16y = -288$



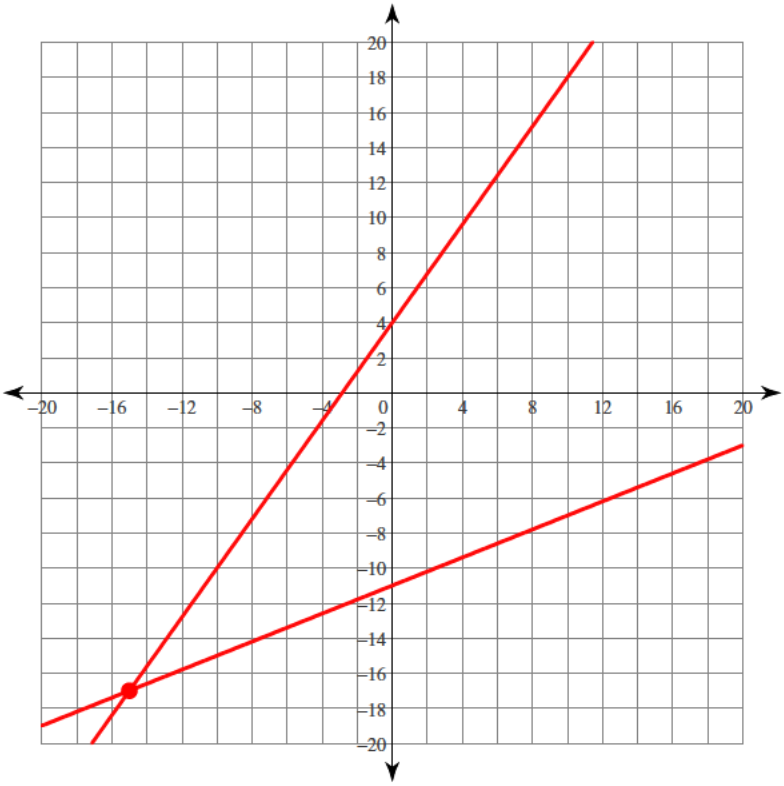
(16, 15)

334) $14 + y = 26x$
$y + 2x = 14$



(1, 12)

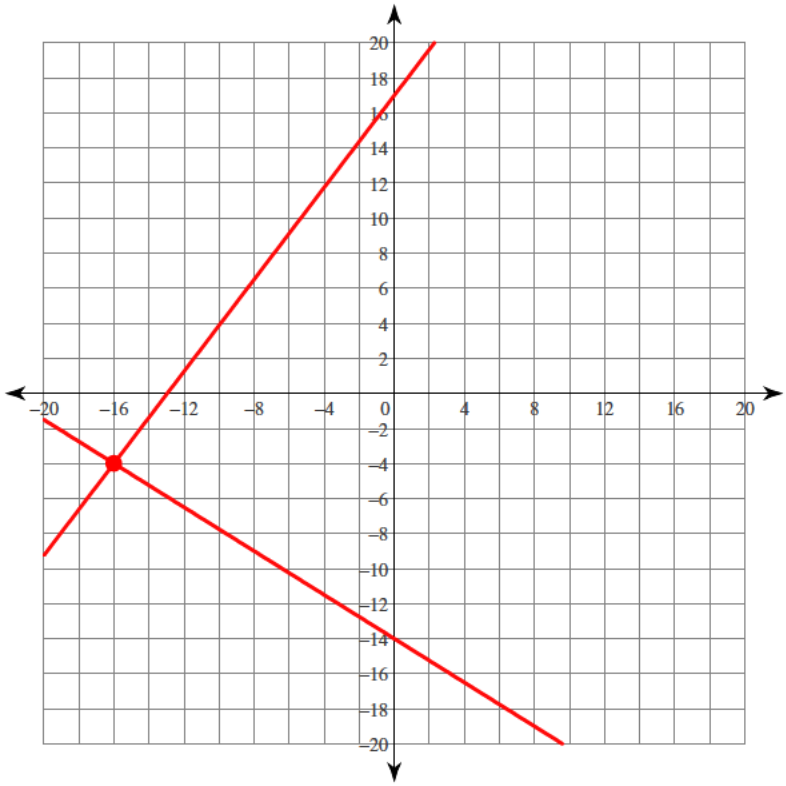
335) $0 = -165 - 15y + 6x$
$-20 = -5y + 7x$



(–15, –17)

336) $0 = -21x + 16y - 272$

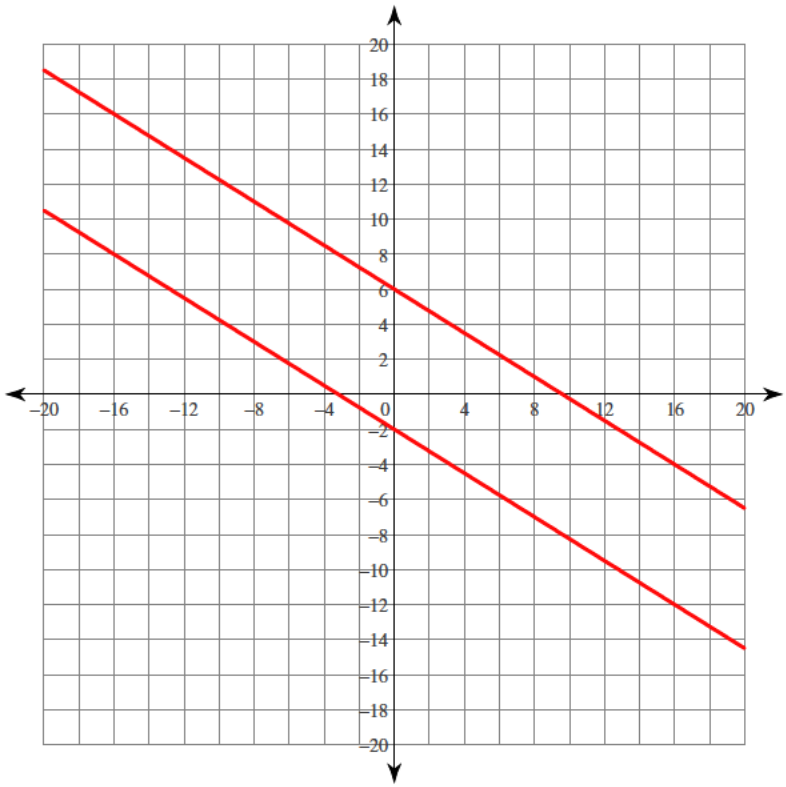
$8y + 5x = -112$



$(-16, -4)$

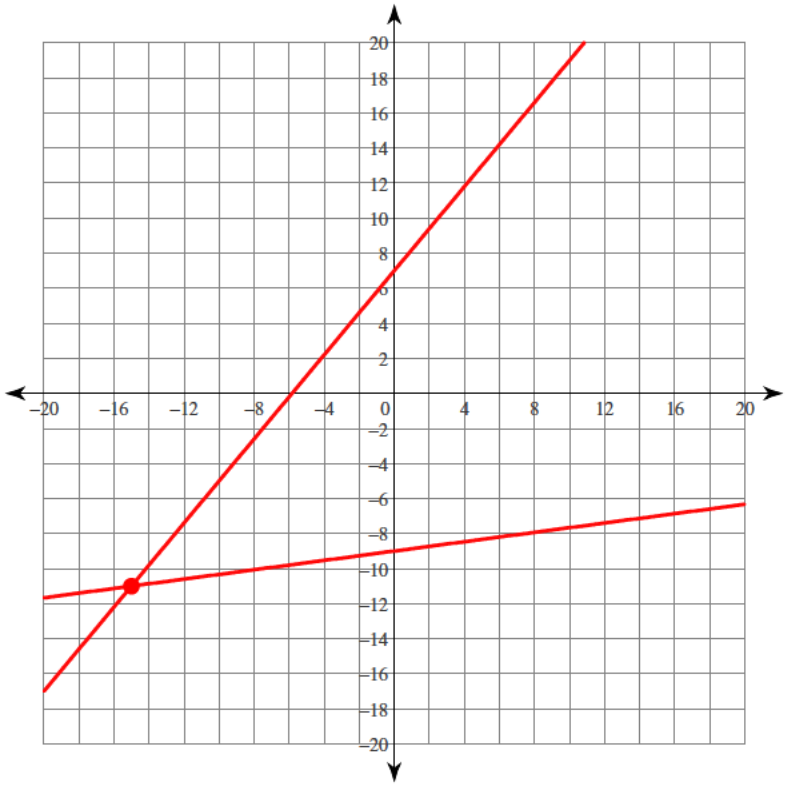
337) $-2 = y + \frac{5}{8}x$

$24y = 144 - 15x$



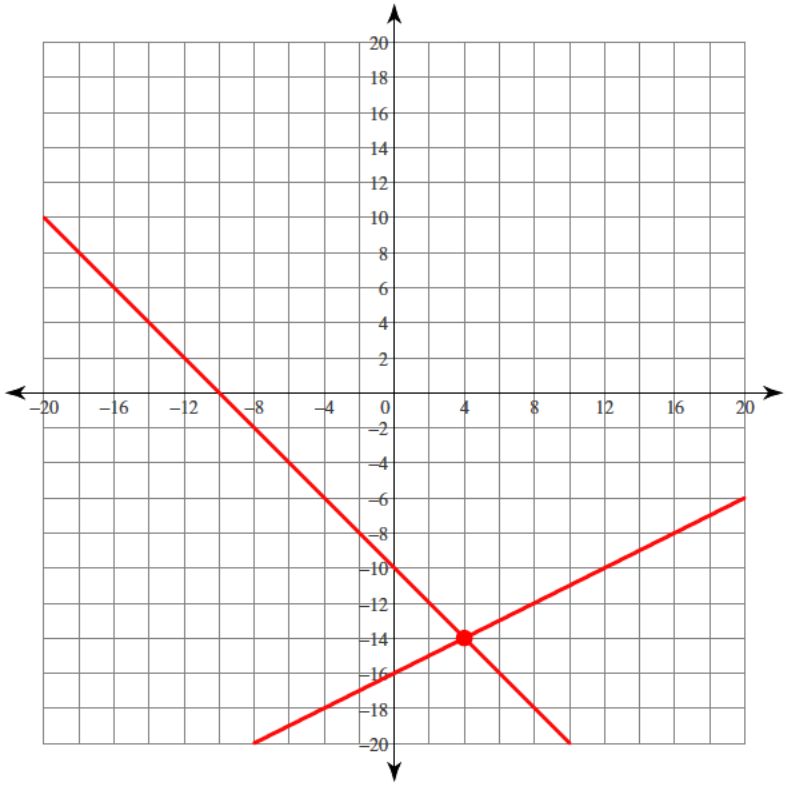
No solution

338) $18x = 15y - 105$
$-30y + 4x = 270$



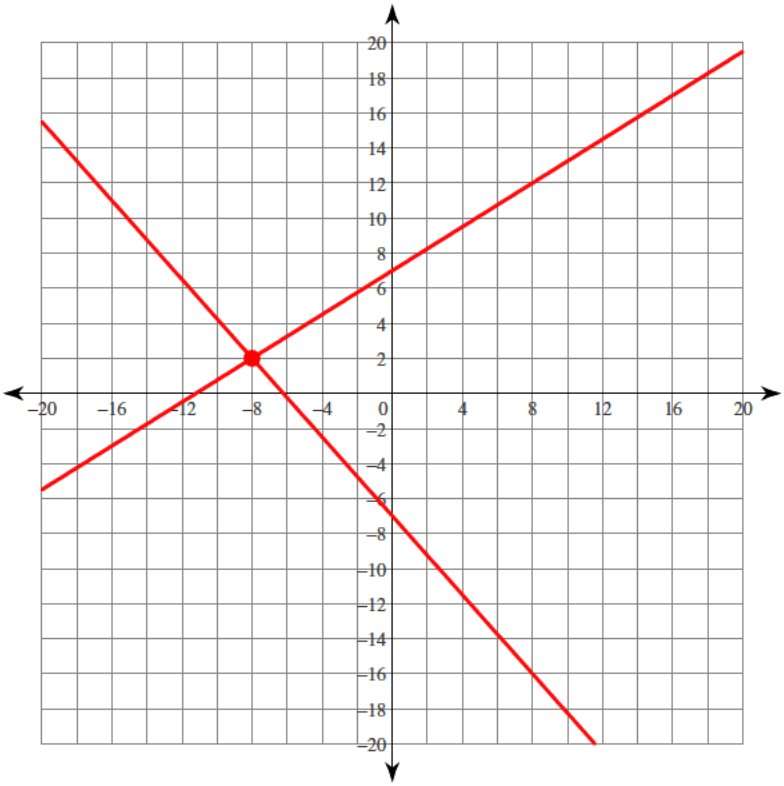
$(-15, -11)$

339) $-2y - 32 = -x$
$y + x = -10$



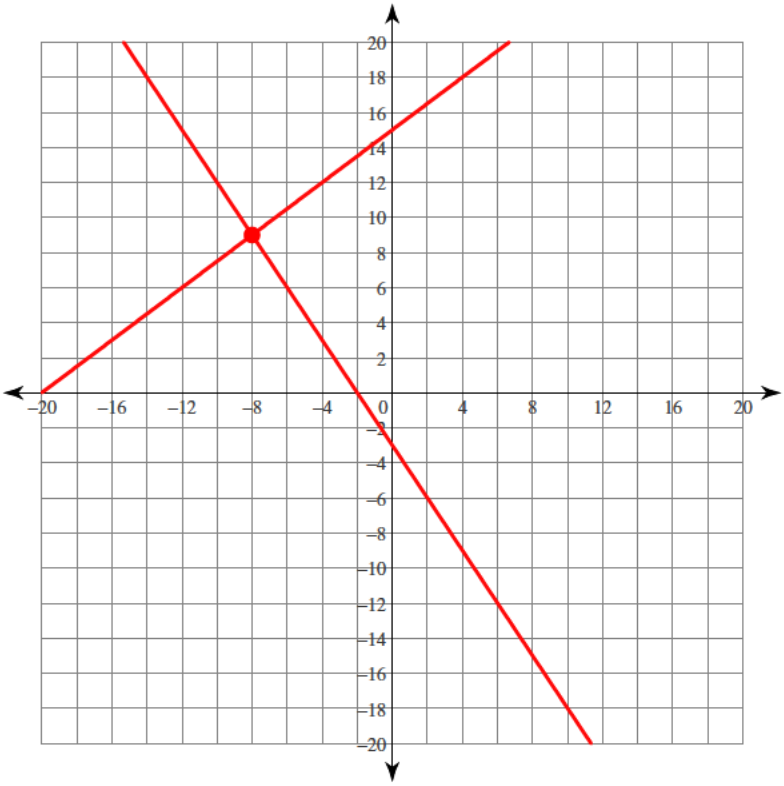
$(4, -14)$

340) $8y - 5x = 56$
$24y = -168 - 27x$



(–8, 2)

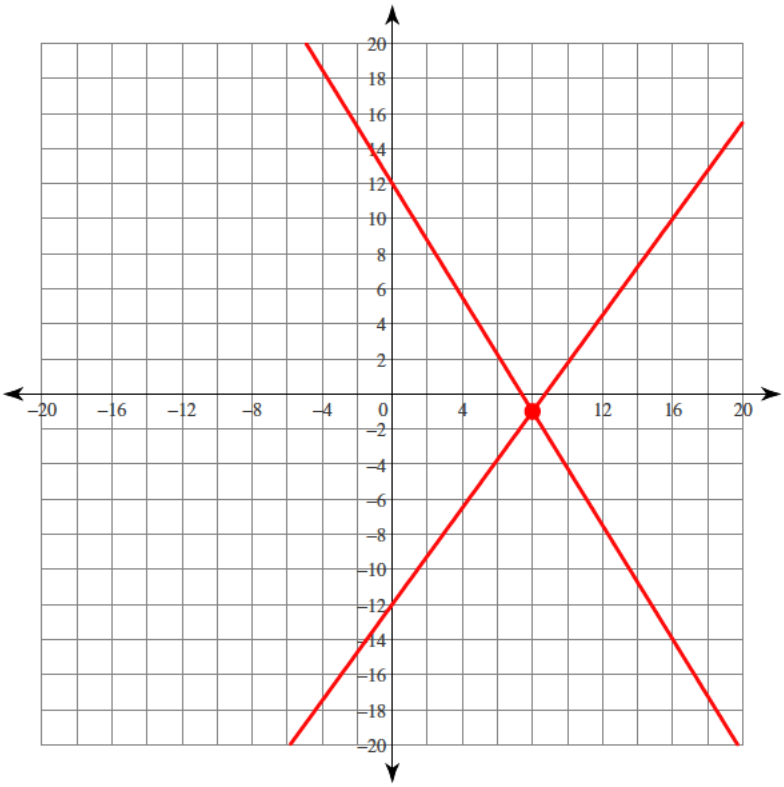
341) $2y + 3x = -6$
$60 + 3x = 4y$



(–8, 9)

342) $0 = -12 - y + \frac{11}{8}x$

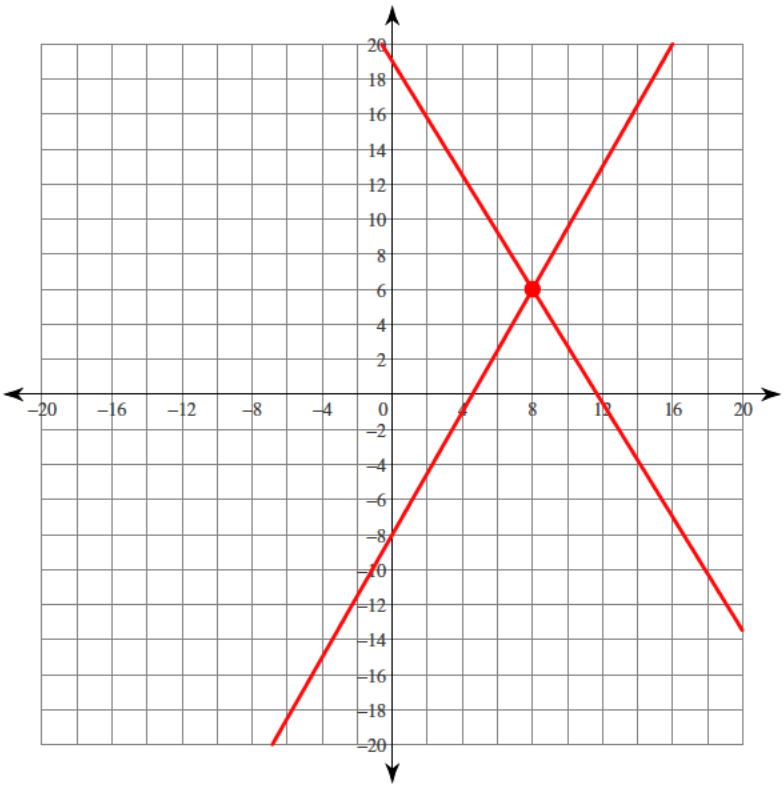
$-96 = -8y - 13x$



(8, –1)

343) $-4y = -7x + 32$

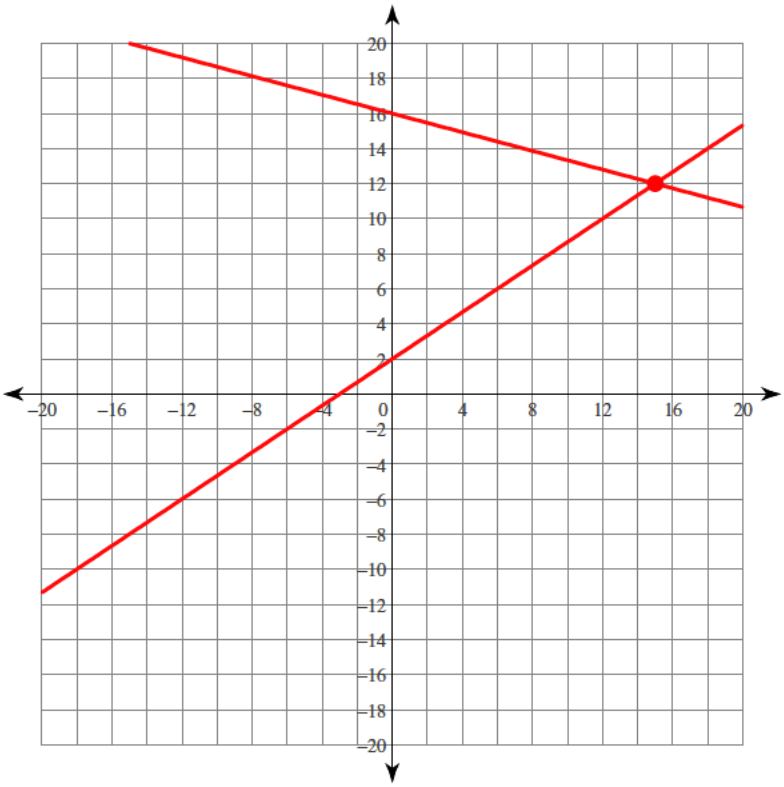
$0 = 152 - 13x - 8y$



(8, 6)

344) $-60 + x = -\frac{15}{4}y$

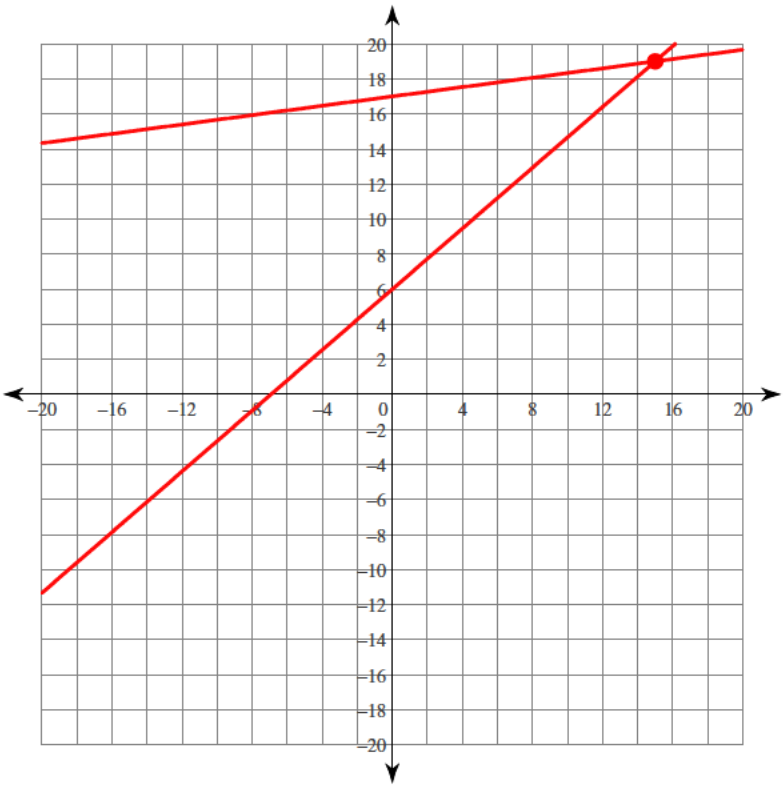
$-2x - 6 = -3y$



(15, 12)

345) $0 = -13x - 90 + 15y$

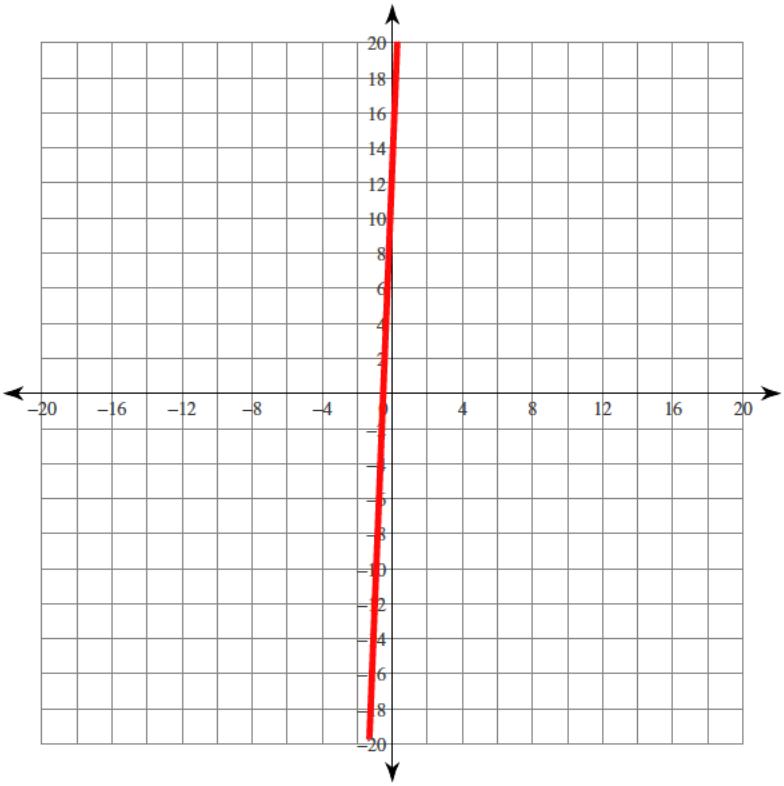
$-15y = -2x - 255$



(15, 19)

346) $15 + 25x = y$

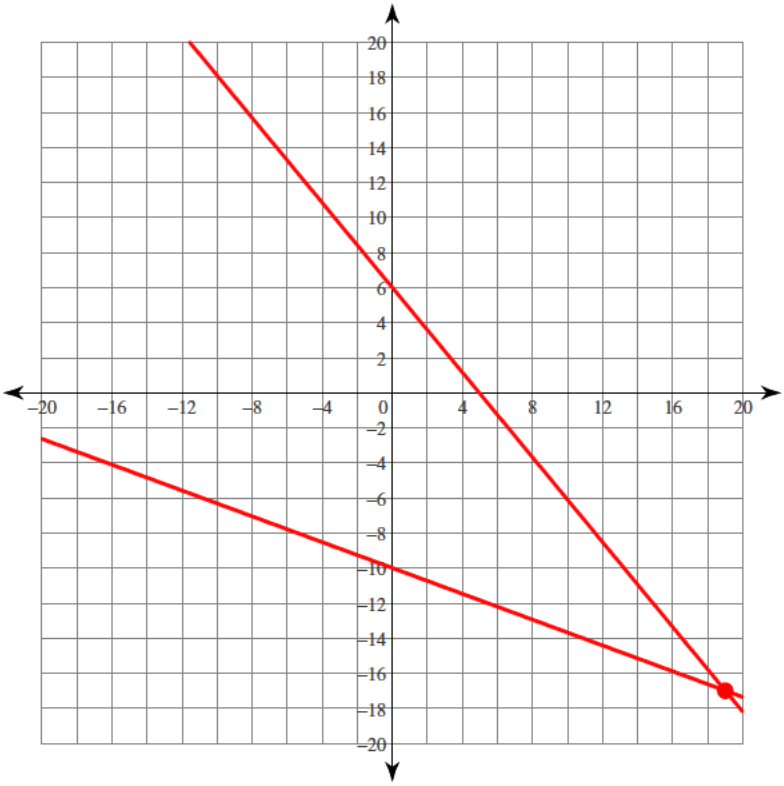
$y = 25x + 11$



No solution

347) $190 = -19y - 7x$

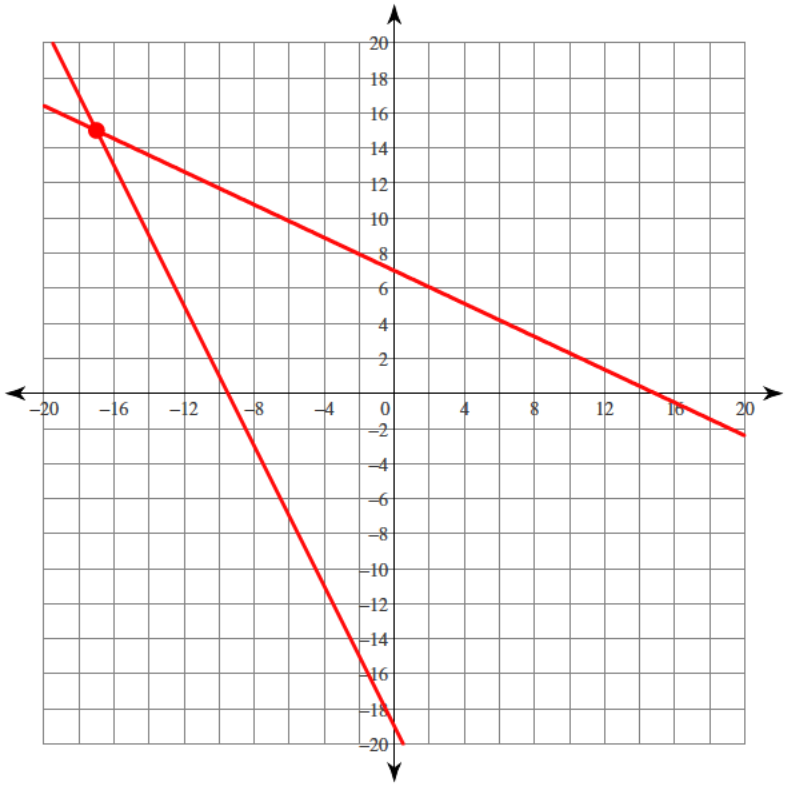
$0 = -23x + 114 - 19y$



$(19, -17)$

348) $-119 = -8x - 17y$

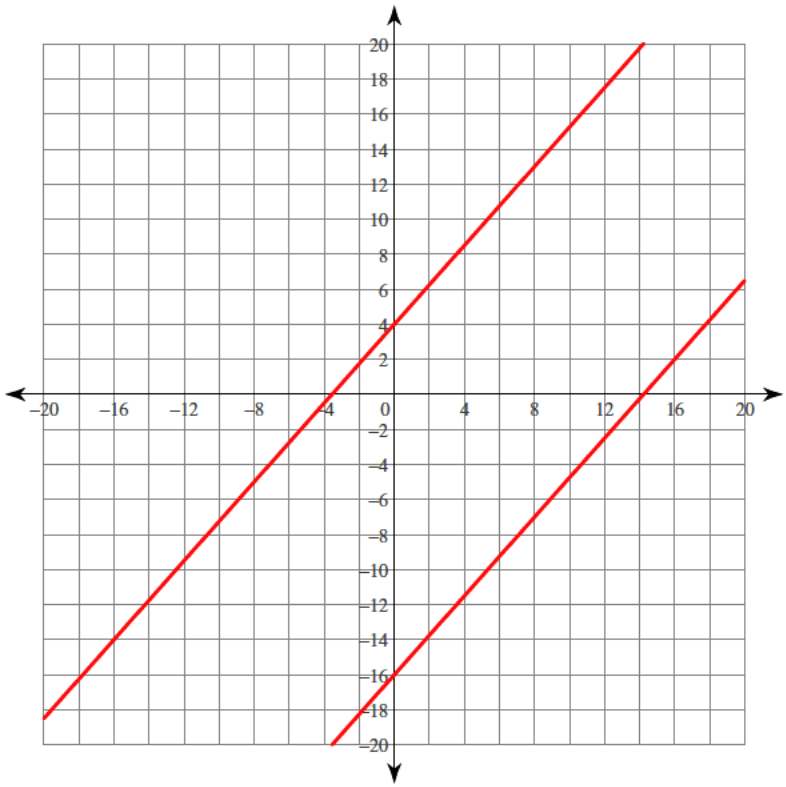
$-y = 19 + 2x$



$(-17, 15)$

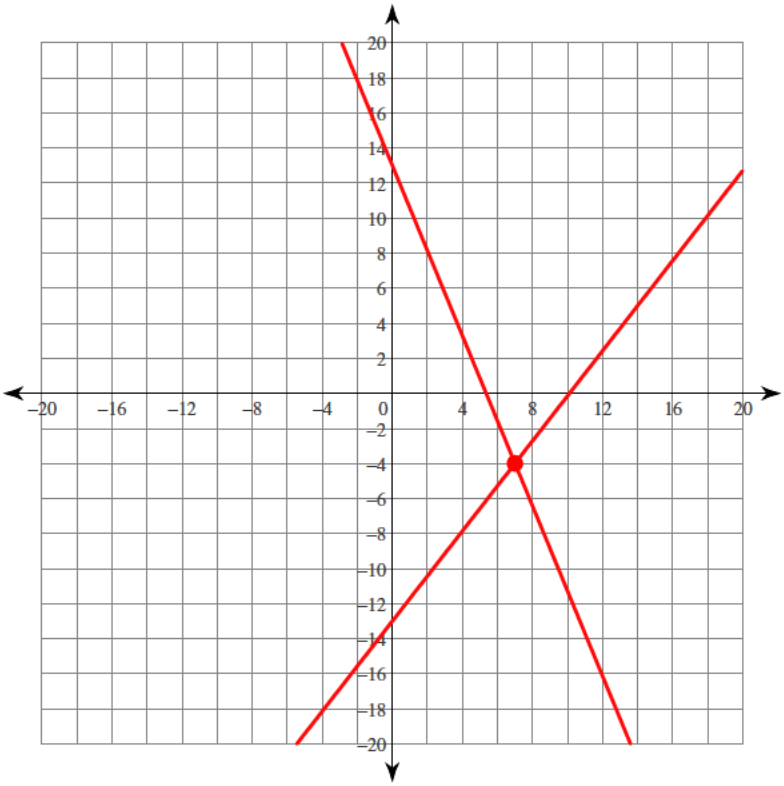
349) $-32 = 9x - 8y$

$-1 - \frac{1}{16}y + \frac{9}{128}x = 0$



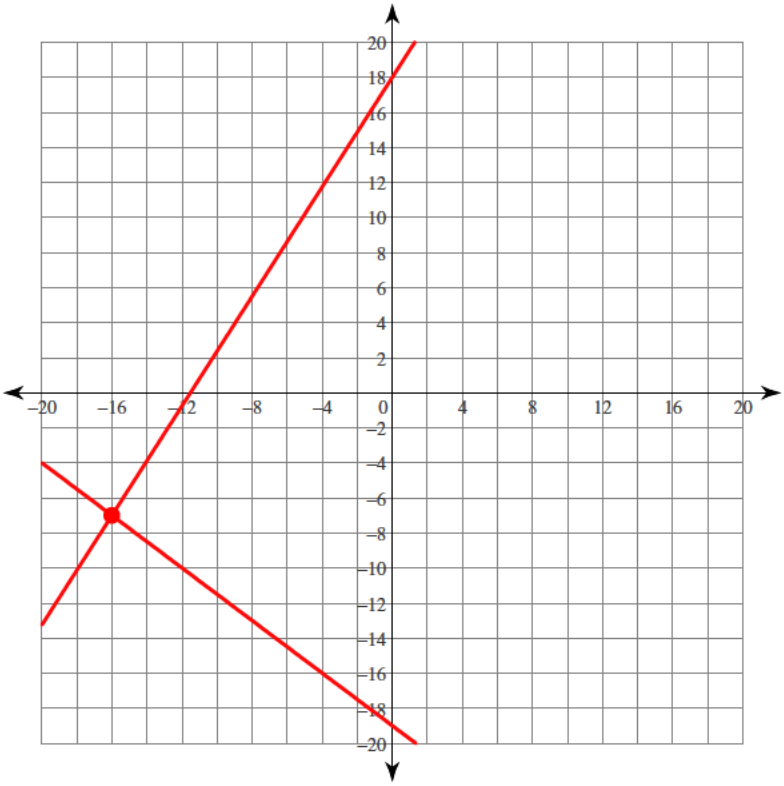
No solution

350) $0 = 21y - 273 + 51x$
$-9x + 91 + 7y = 0$



(7, –4)

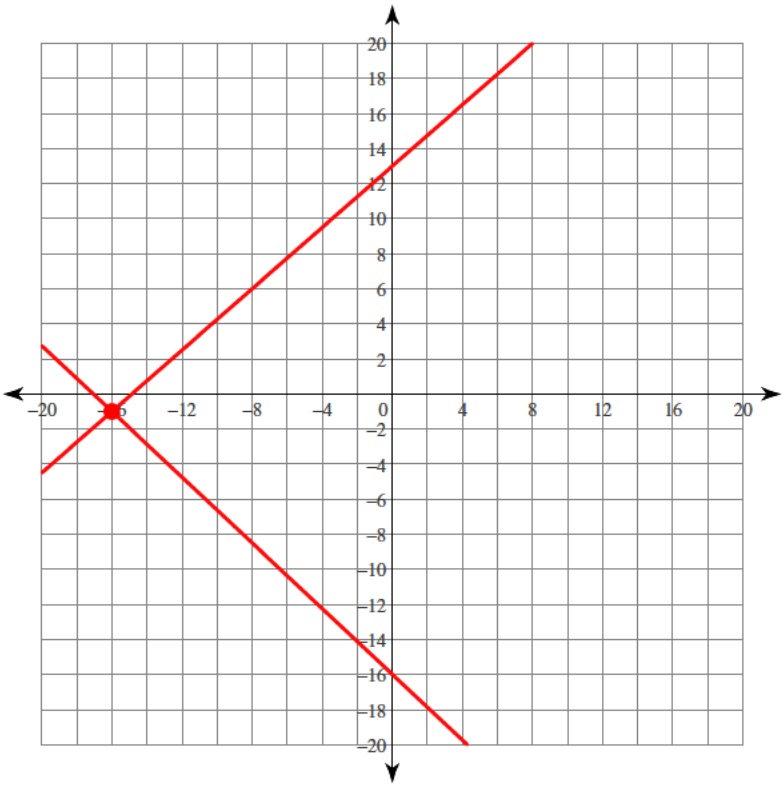
351) $4y + 76 + 3x = 0$
$288 = -25x + 16y$



(–16, –7)

352) $\frac{15}{256}x + \frac{1}{16}y = -1$

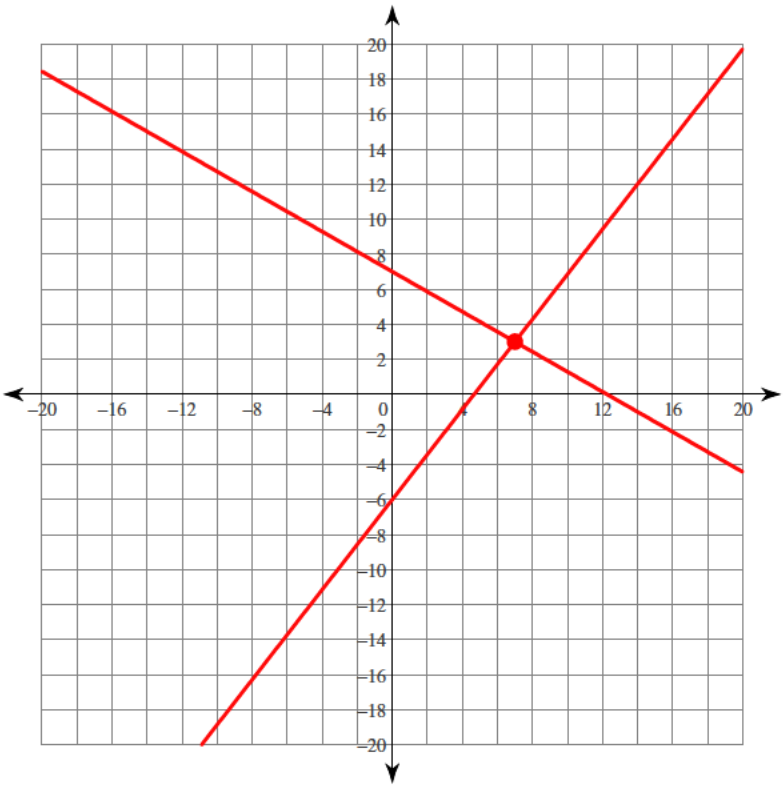
$104 = -7x + 8y$



(–16, –1)

353) $-9x + 42 = -7y$

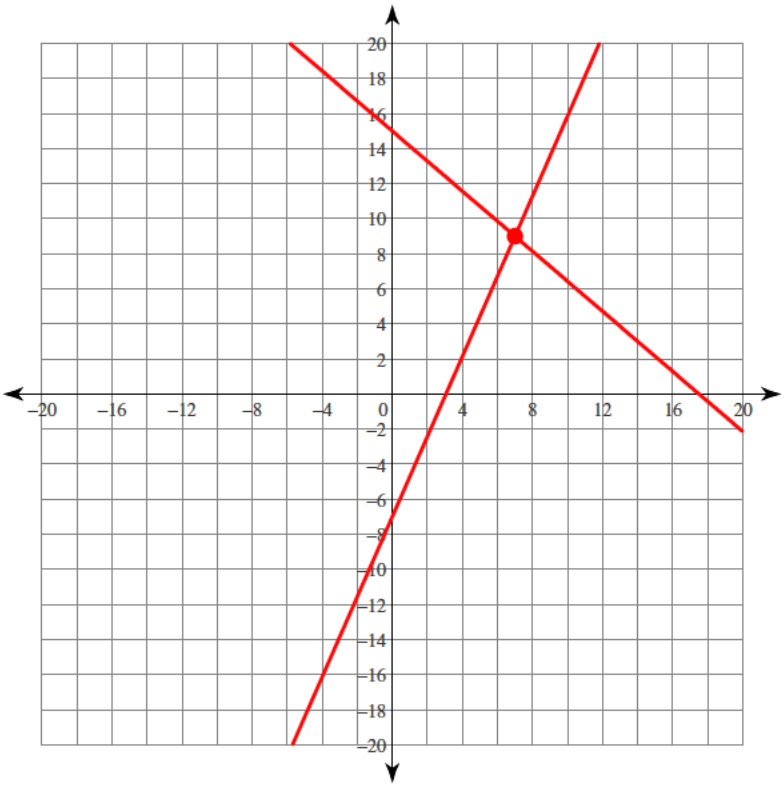
$0 = -7y + 49 - 4x$



(7, 3)

354) $0 = -49 - 7y + 16x$

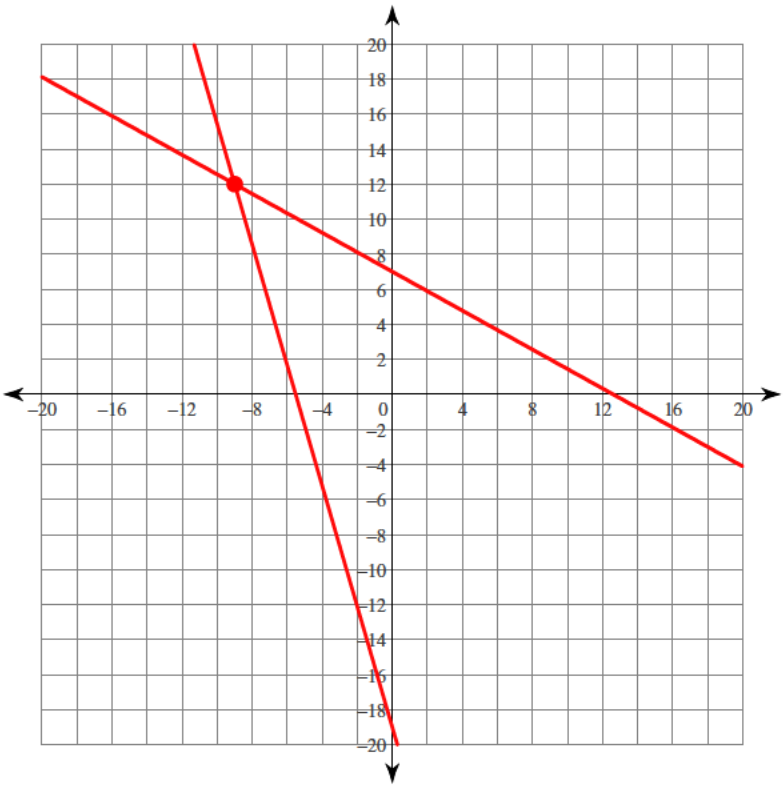
$\frac{6}{7}x = 15 - y$



(7, 9)

355) $31x + 171 = -9y$

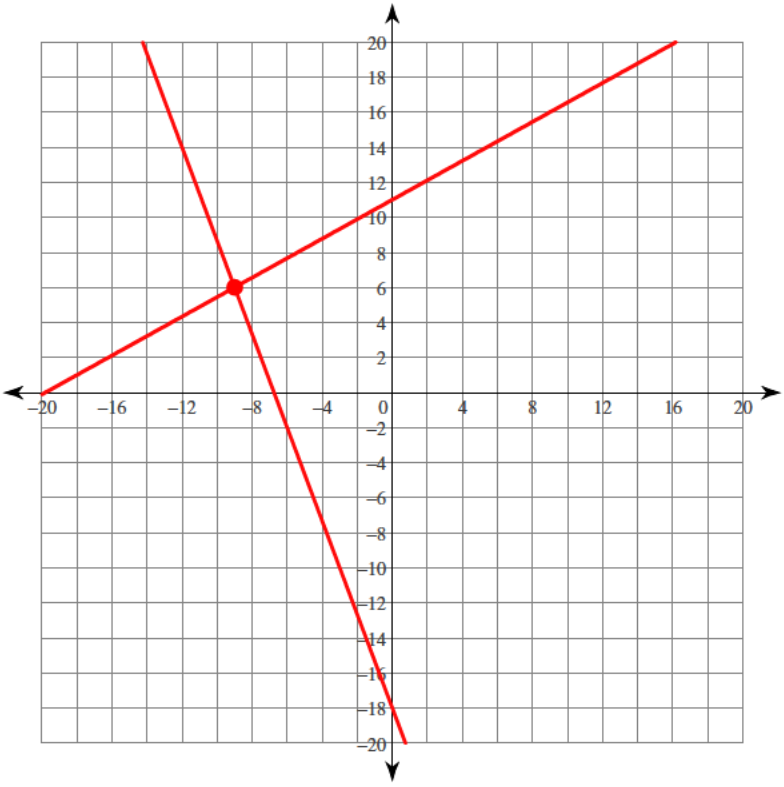
$-126 = -10x - 18y$



(–9, 12)

356) $-\frac{1}{11}y+\frac{5}{99}x=-1$

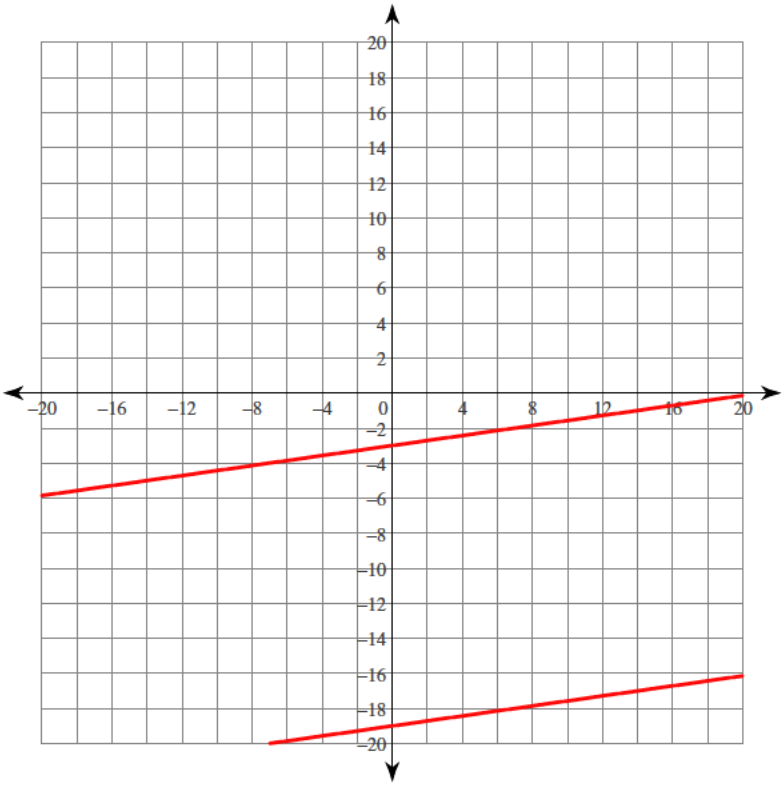
$y+18=-\frac{8}{3}x$



(–9, 6)

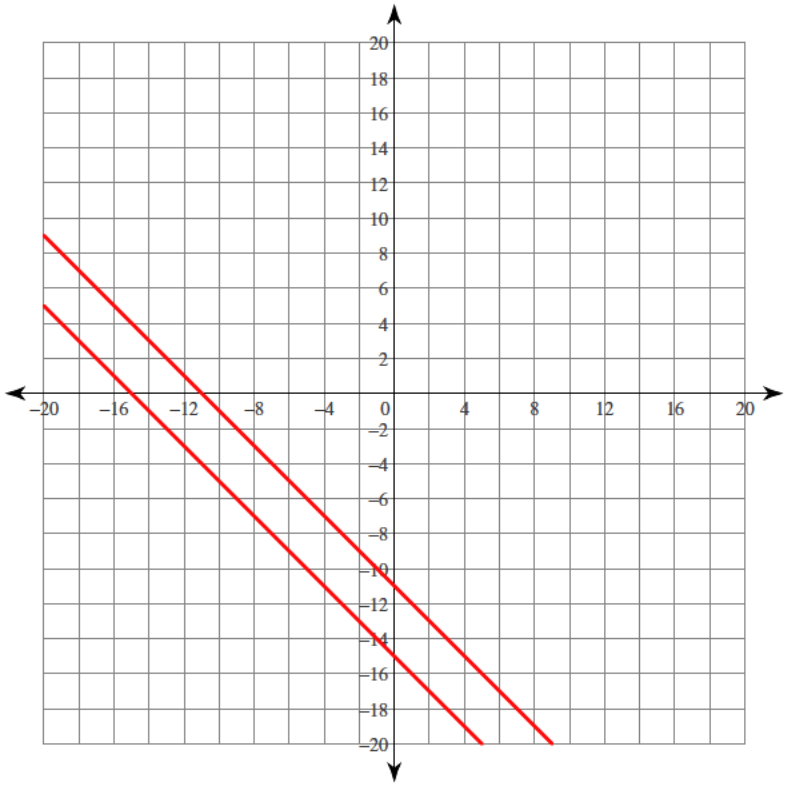
357) $-133=-x+7y$

$x=7y+21$



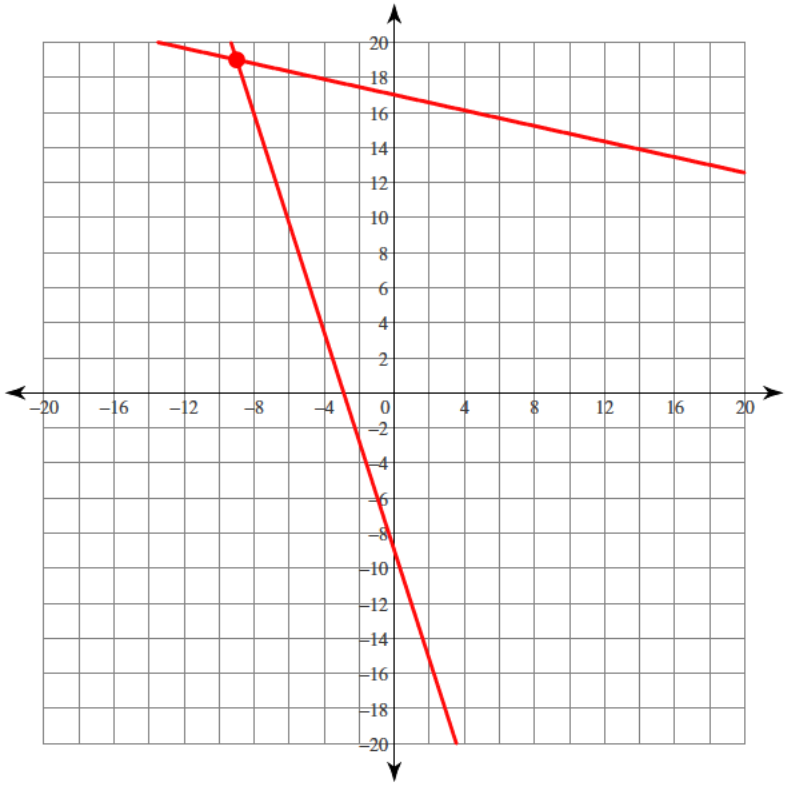
No solution

358) $y = -15 - x$
$-x - 11 = y$



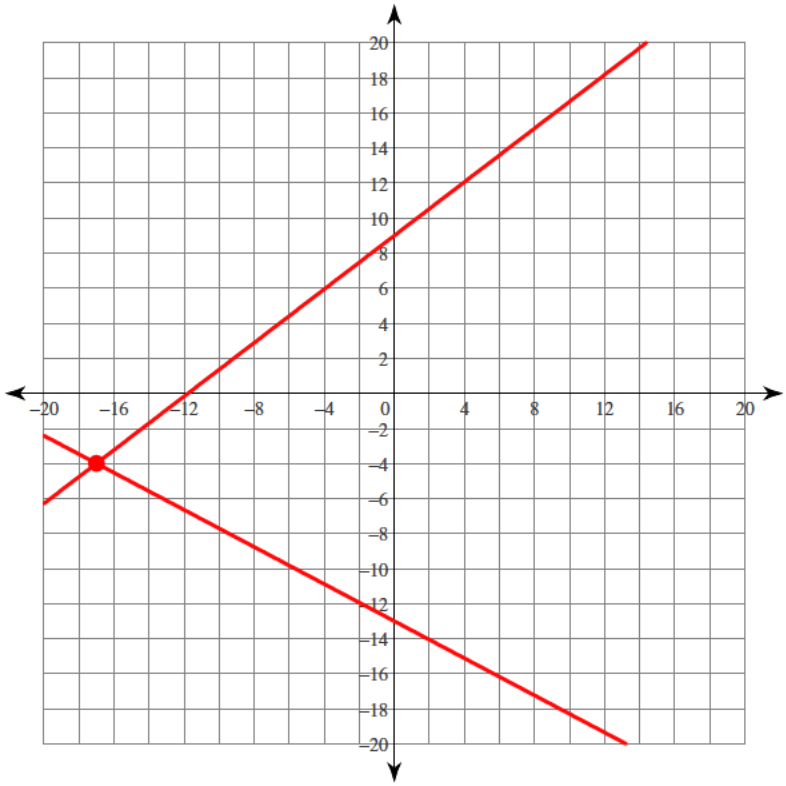
No solution

359) $9y + 2x = 153$
$28x + 81 = -9y$



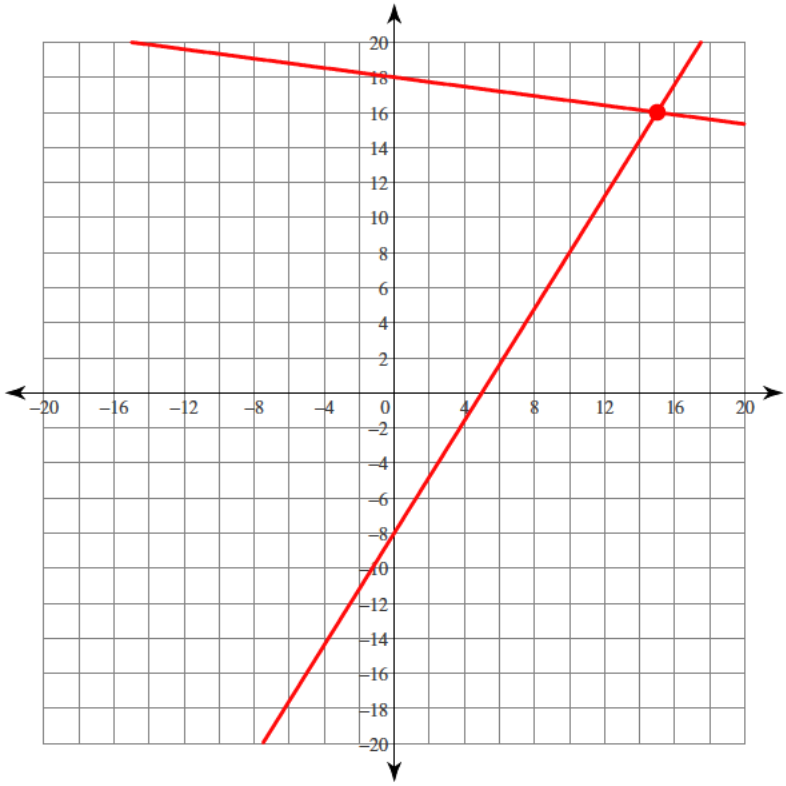
(–9, 19)

360) $-17y + 13x + 153 = 0$
$27x = -51y - 663$



(–17, –4)

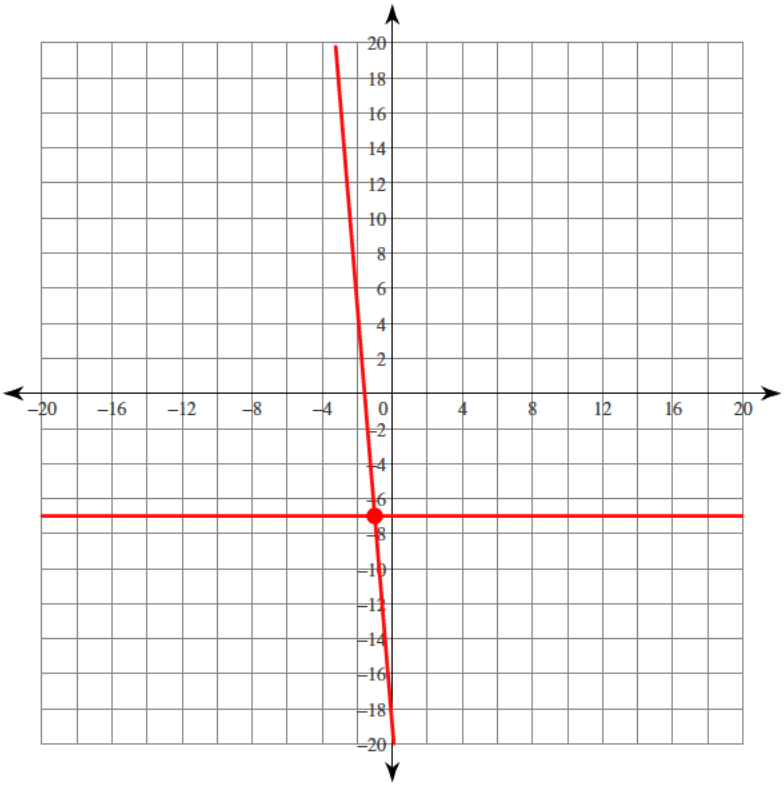
361) $270 - 2x = 15y$
$0 = -8x + 40 + 5y$



(15, 16)

362) $0 = 7 + y$

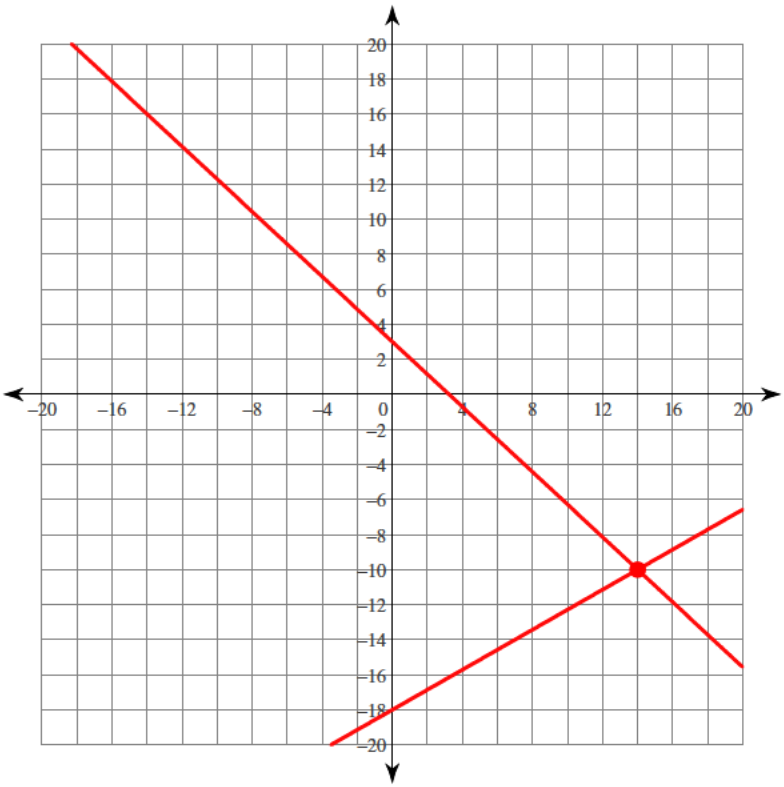
$-y - 19 = 12x$



$(-1, -7)$

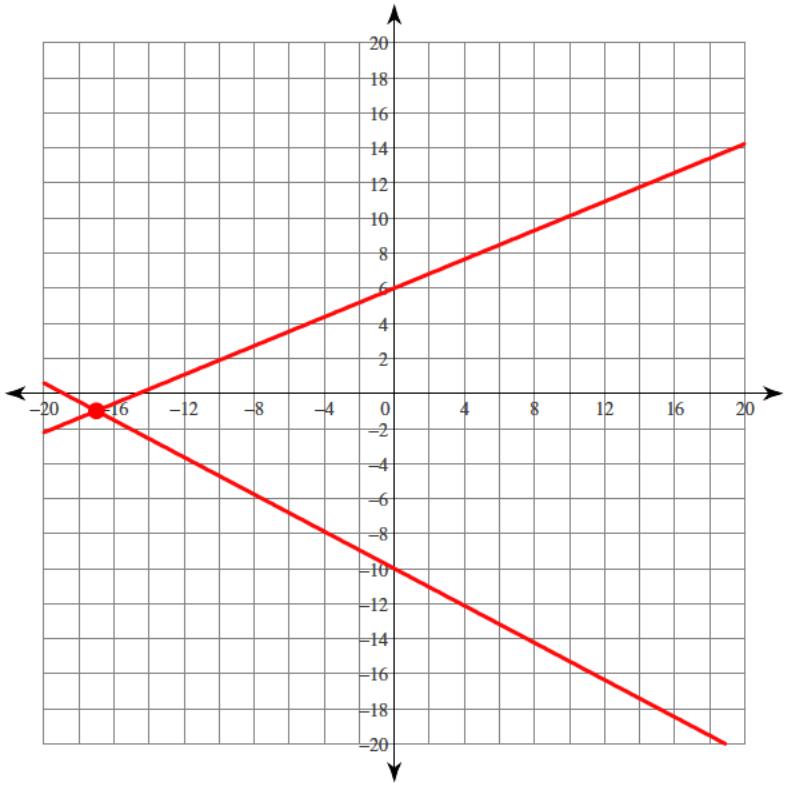
363) $14y = 42 - 13x$

$-18 - y + \frac{4}{7}x = 0$



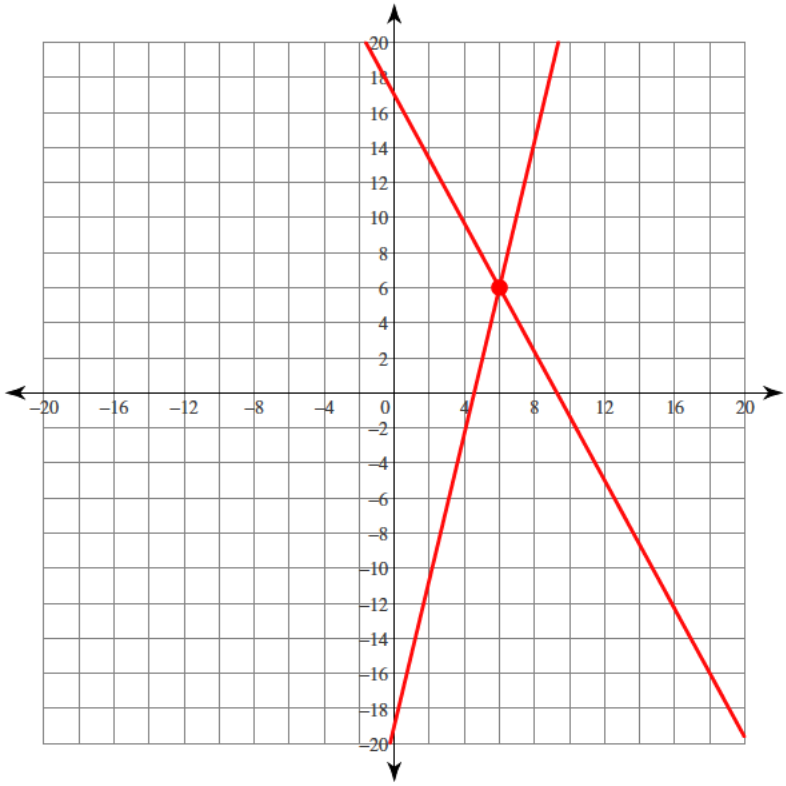
$(14, -10)$

364) $7x = 17y - 102$
$170 + 17y = -9x$



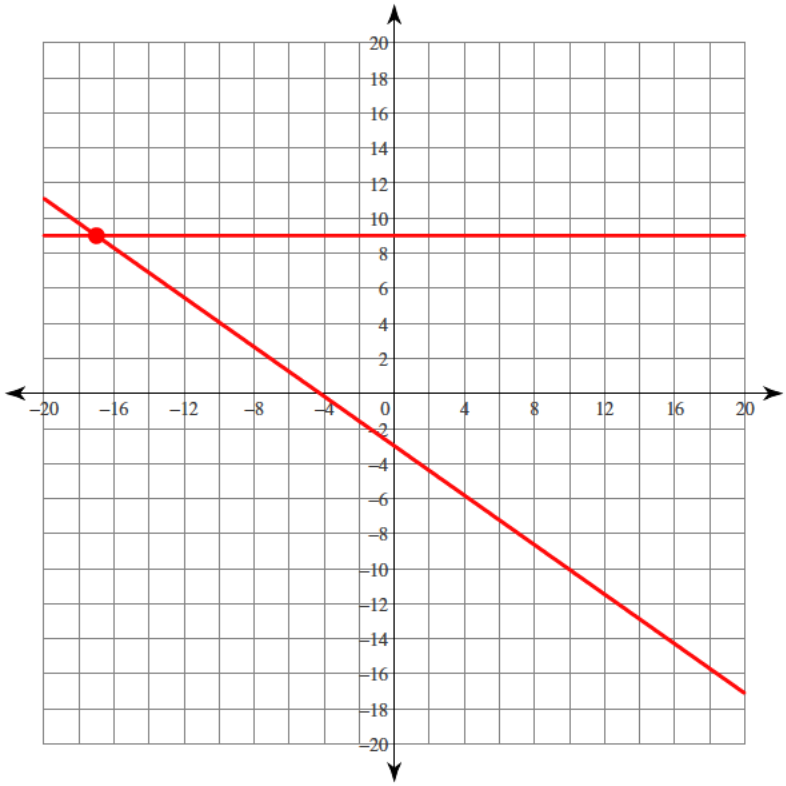
$(-17, -1)$

365) $0 = -11x + 102 - 6y$
$25x = 6y + 114$



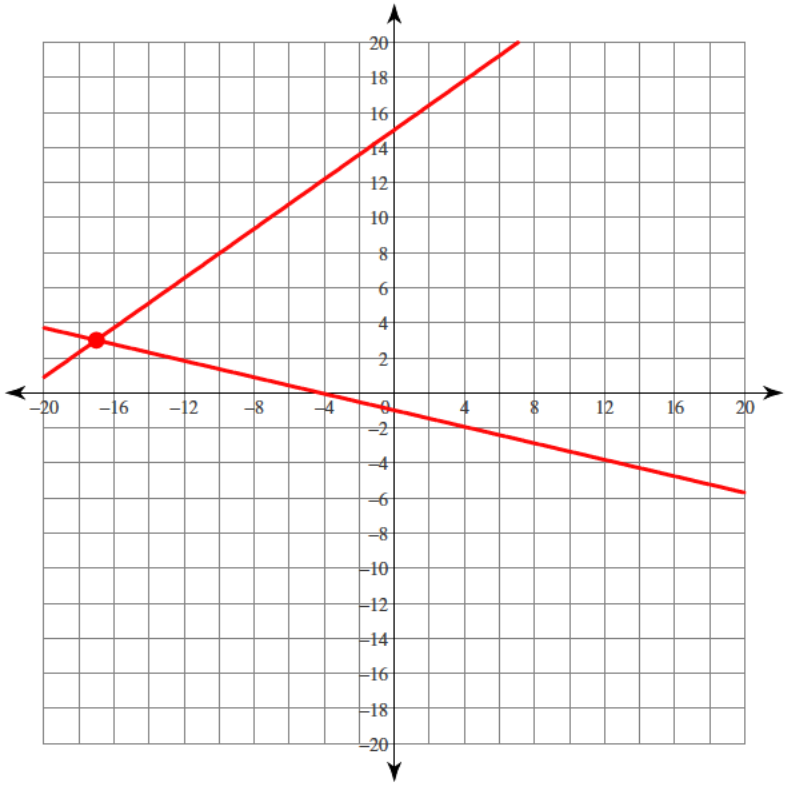
$(6, 6)$

366) $12x + 17y = -51$
$y - 9 = 0$



$(-17, 9)$

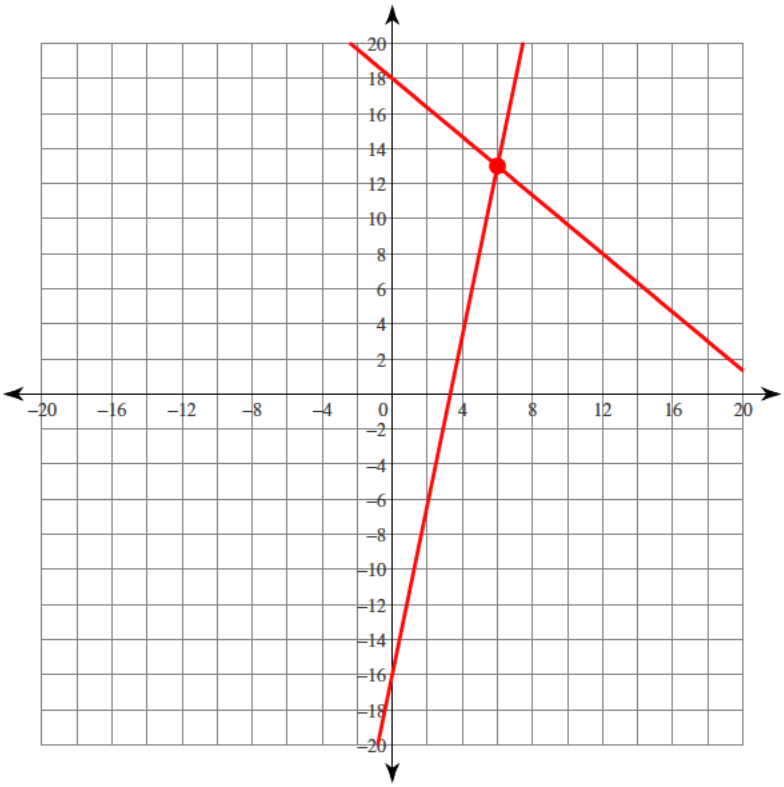
367) $-4x = 17 + 17y$
$-255 = -17y + 12x$



$(-17, 3)$

368) $15x = 324 - 18y$

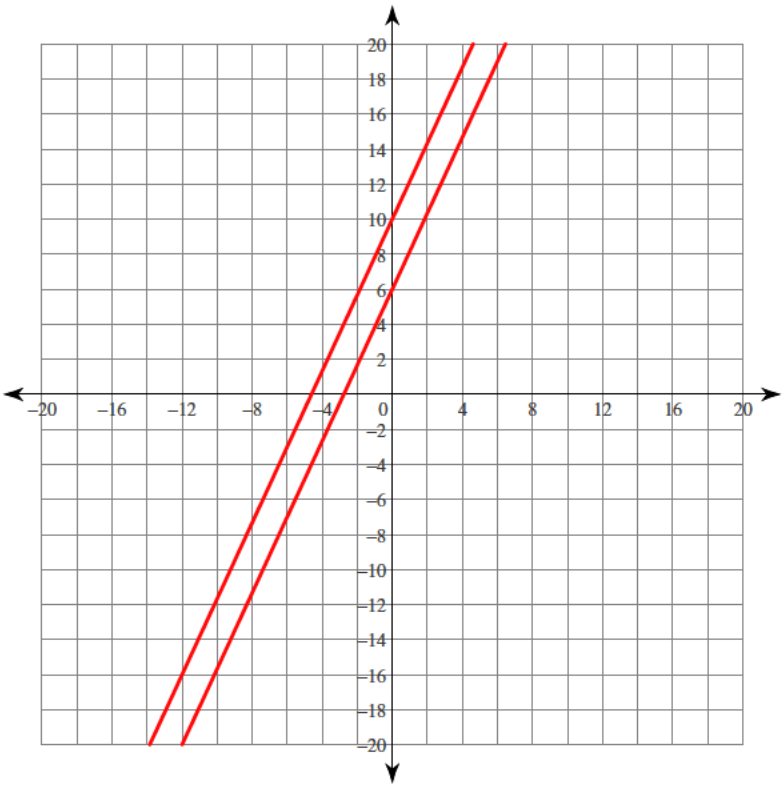
$-\frac{96}{29} = -x + \frac{6}{29}y$



(6, 13)

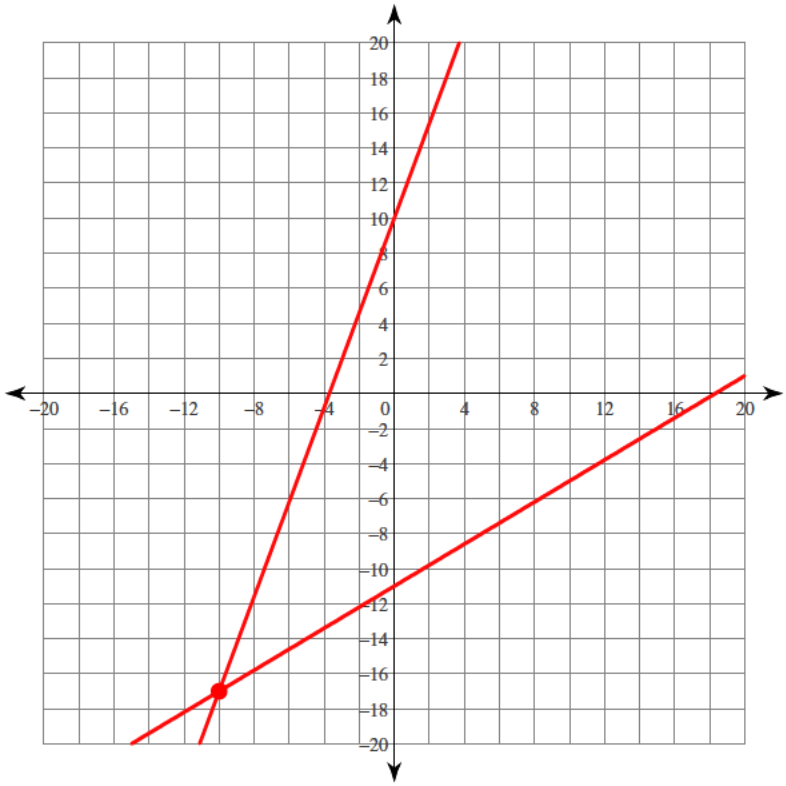
369) $-6y + 13x = -36$

$60 = 6y - 13x$



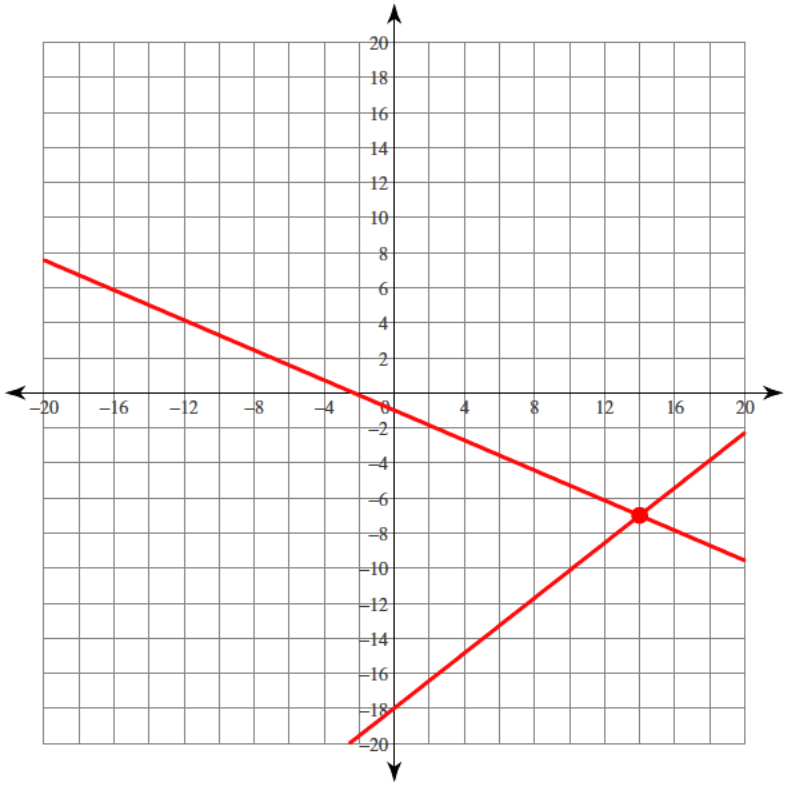
No solution

370) $-55 + 3x - 5y = 0$
$10y = 100 + 27x$



$(-10, -17)$

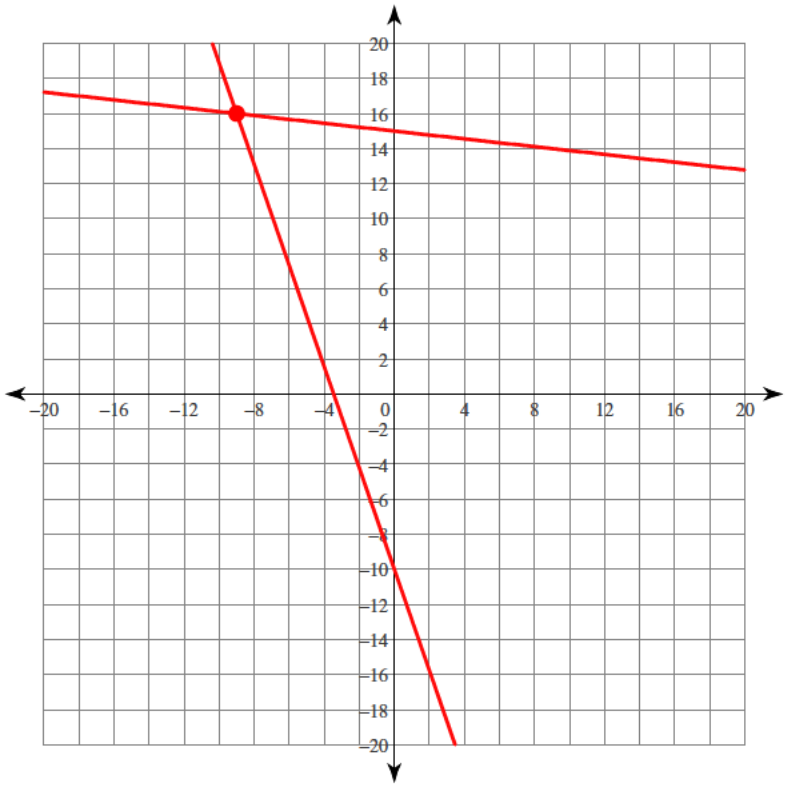
371) $-756 - 42y = -33x$
$6x + 14y = -14$



$(14, -7)$

372) $x = 135 - 9y$

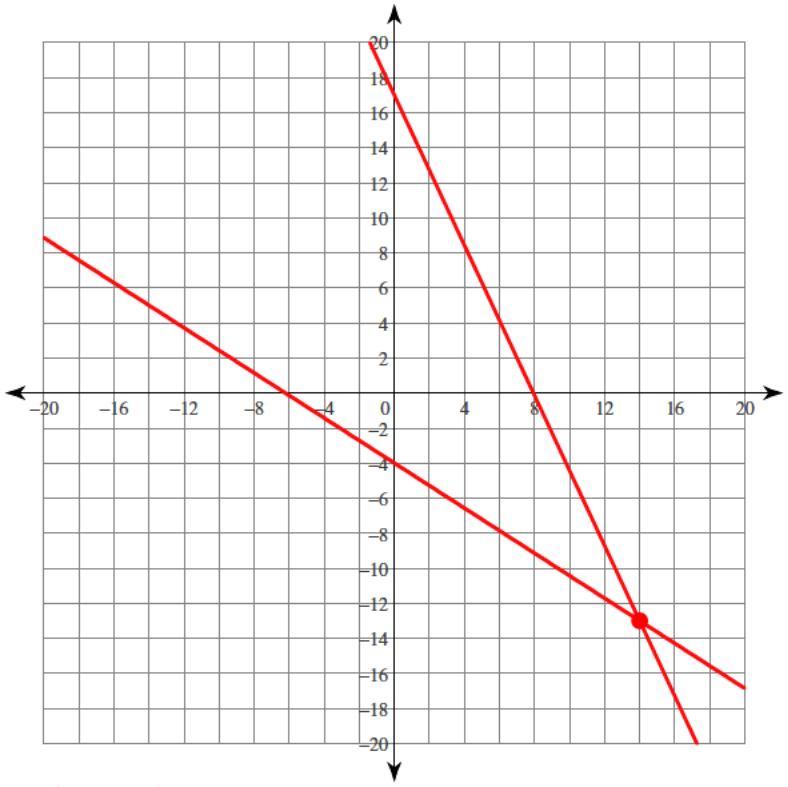
$\frac{3}{10}y + \frac{13}{15}x = -3$



(–9, 16)

373) $-9x - 56 = 14y$

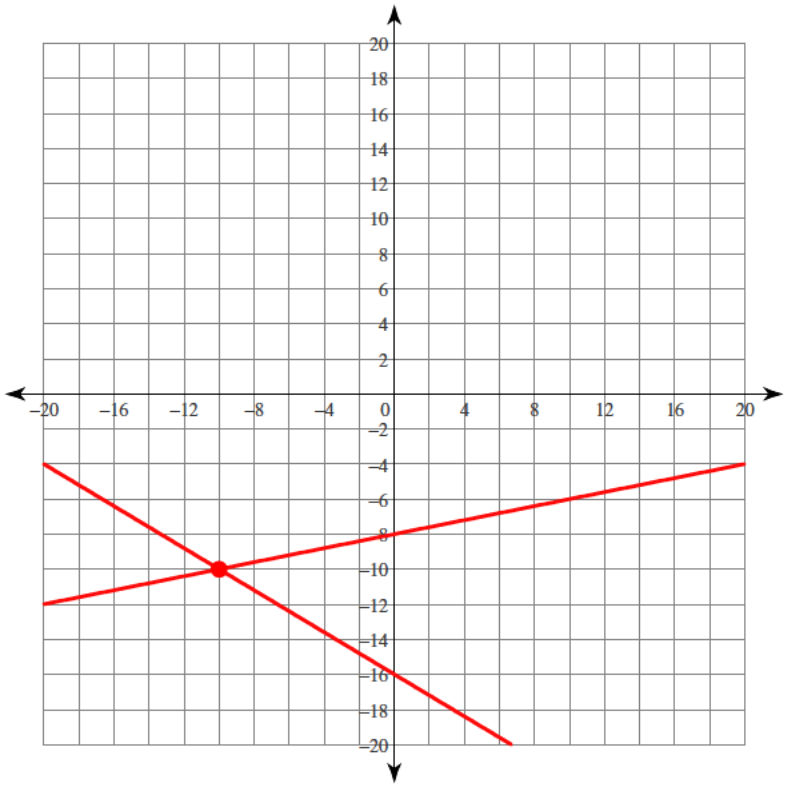
$-2x + \frac{238}{15} - \frac{14}{15}y = 0$



(14, –13)

374) $-3-\frac{3}{16}y=\frac{9}{80}x$

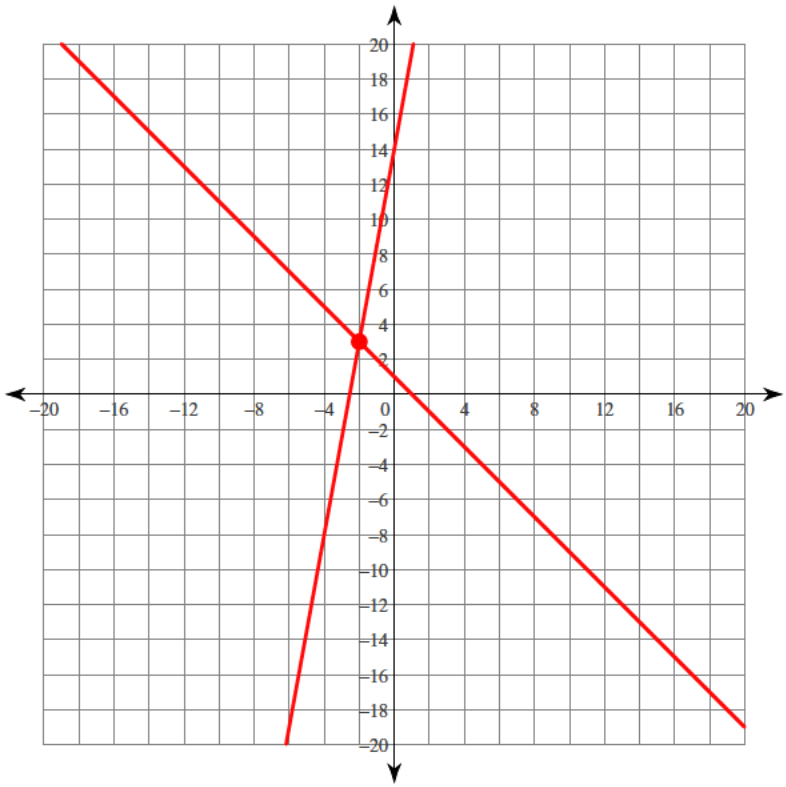
$-80-10y=-2x$



(–10, –10)

375) $1=x+y$

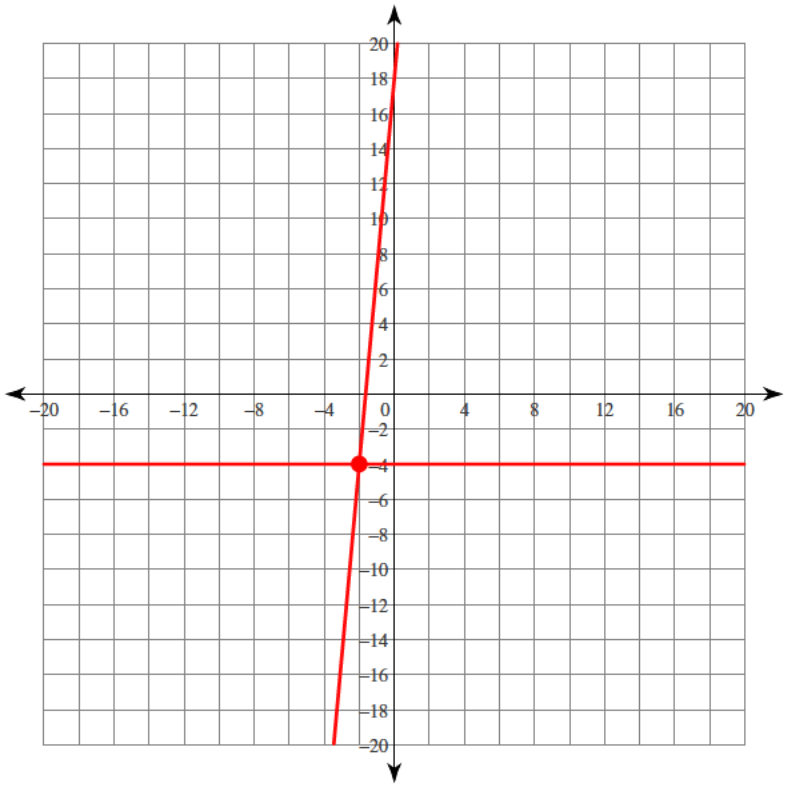
$11x+28=2y$



(–2, 3)

376) $-2y = -36 - 22x$

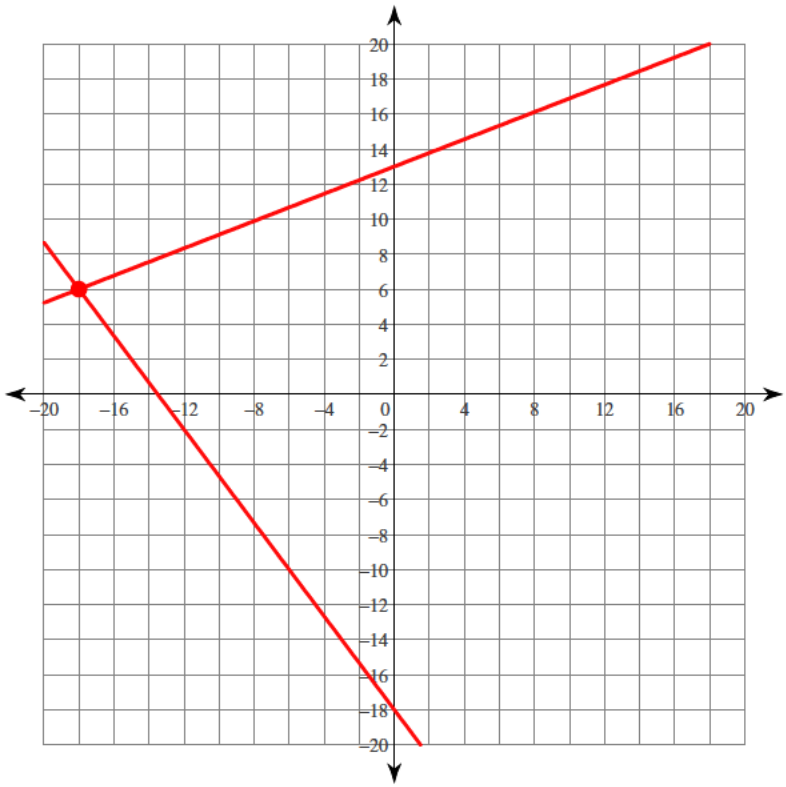
$\frac{1}{4}y = -1$



(–2, –4)

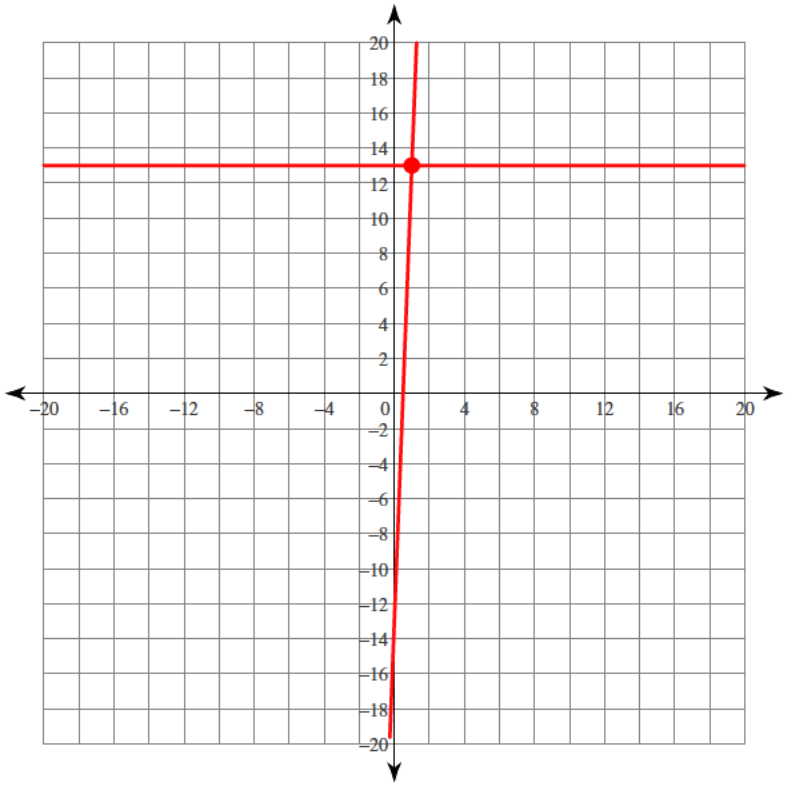
377) $-702 + 54y = 21x$

$12x = -162 - 9y$



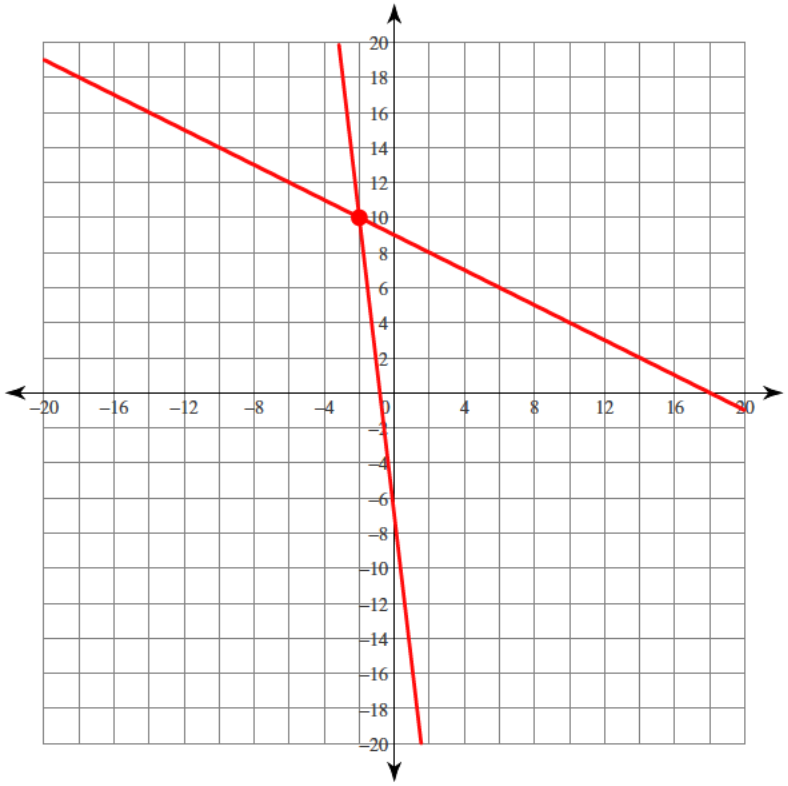
(–18, 6)

378) $26x - y = 13$
$13 - y = 0$



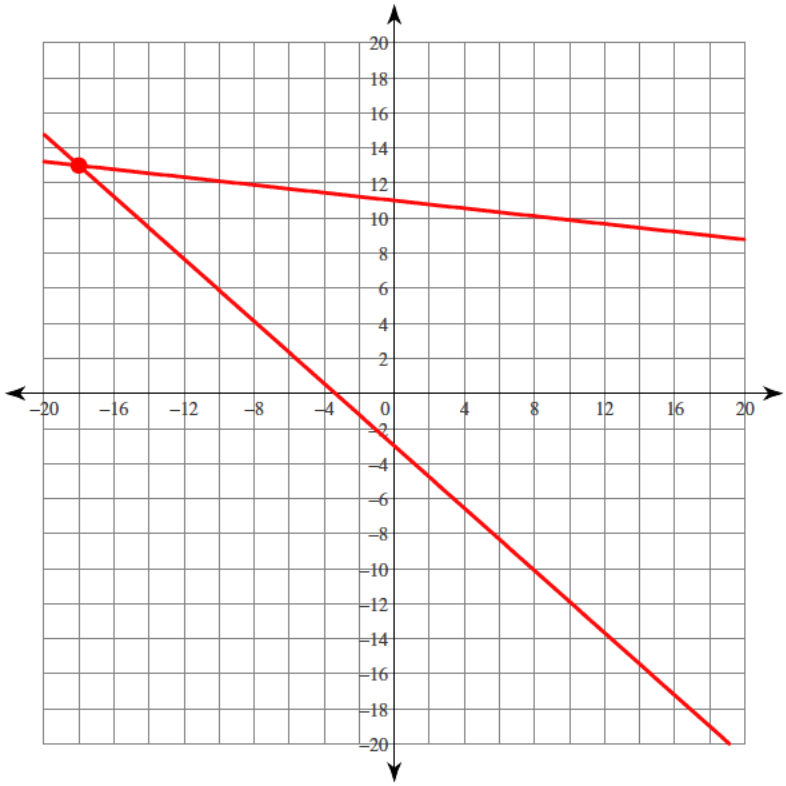
(1, 13)

379) $17x + 14 + 2y = 0$
$-2y = x - 18$



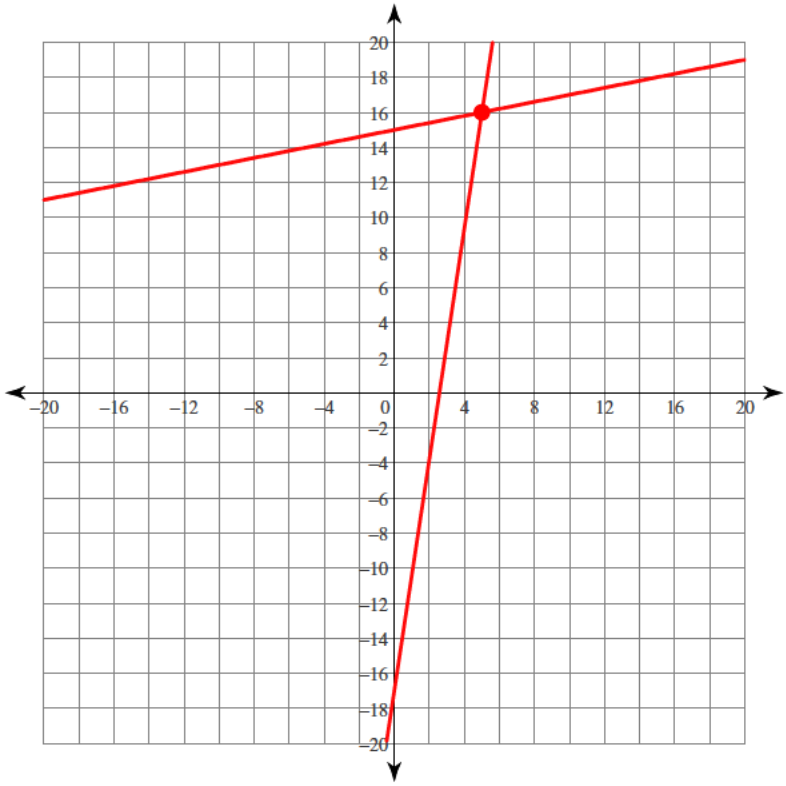
(–2, 10)

380) $x + 9y = 99$
$0 = -9y - 8x - 27$



(–18, 13)

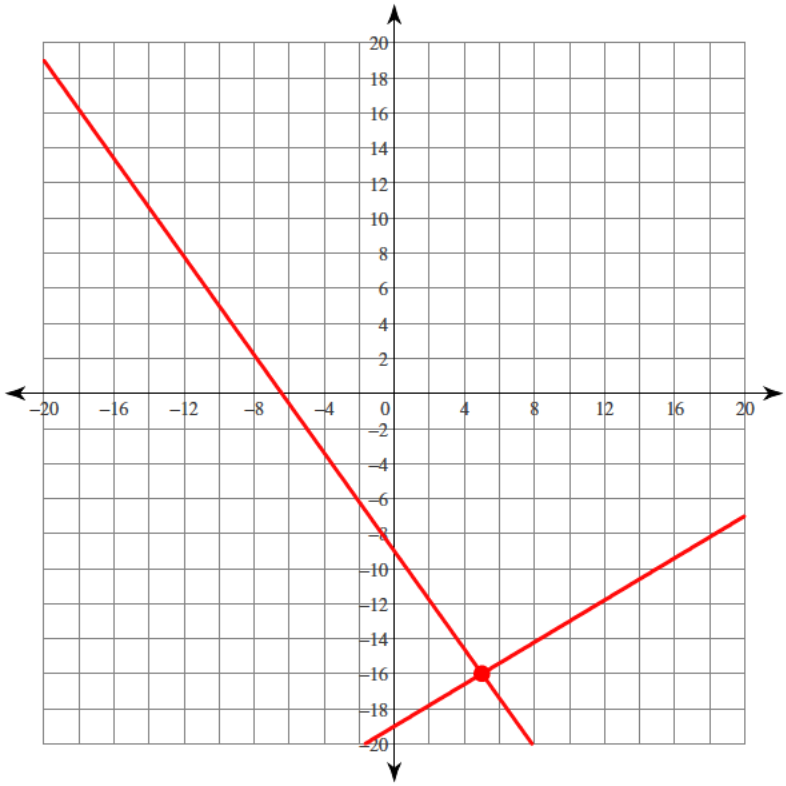
381) $5y - 33x = -85$
$-x + 5y = 75$



(5, 16)

382) $-95 + 3x = 5y$

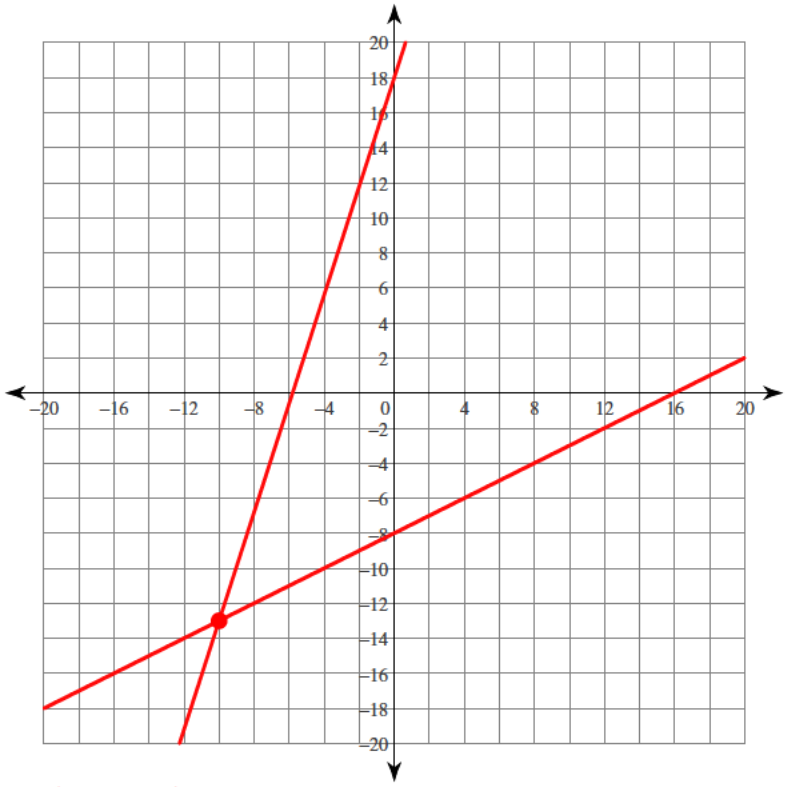
$45 = -5y - 7x$



(5, –16)

383) $y = -8 + \frac{1}{2}x$

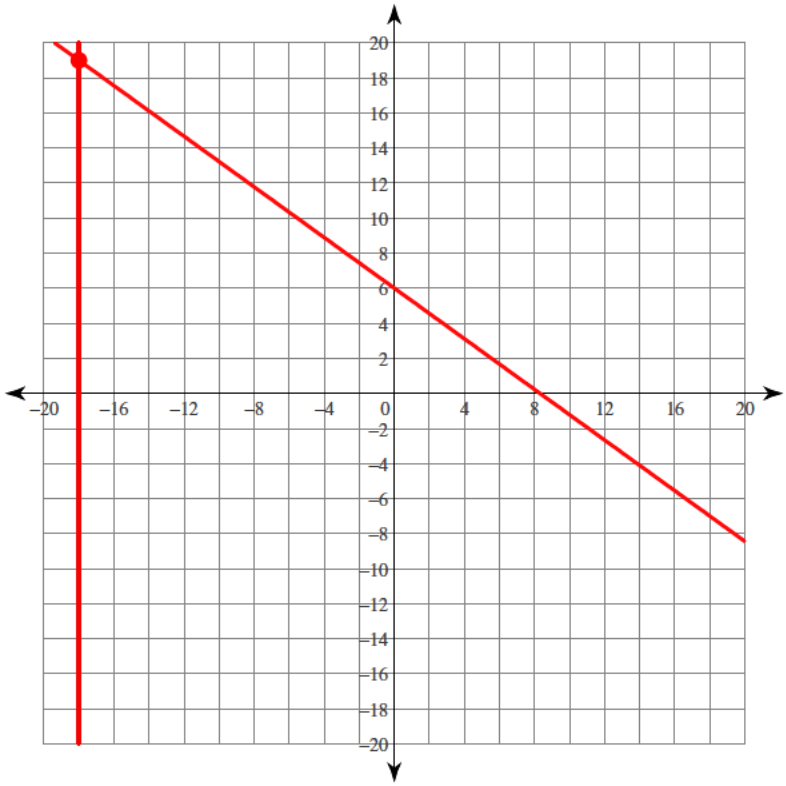
$-y = -18 - \frac{31}{10}x$



(–10, –13)

384) $0 = -3x - 54$

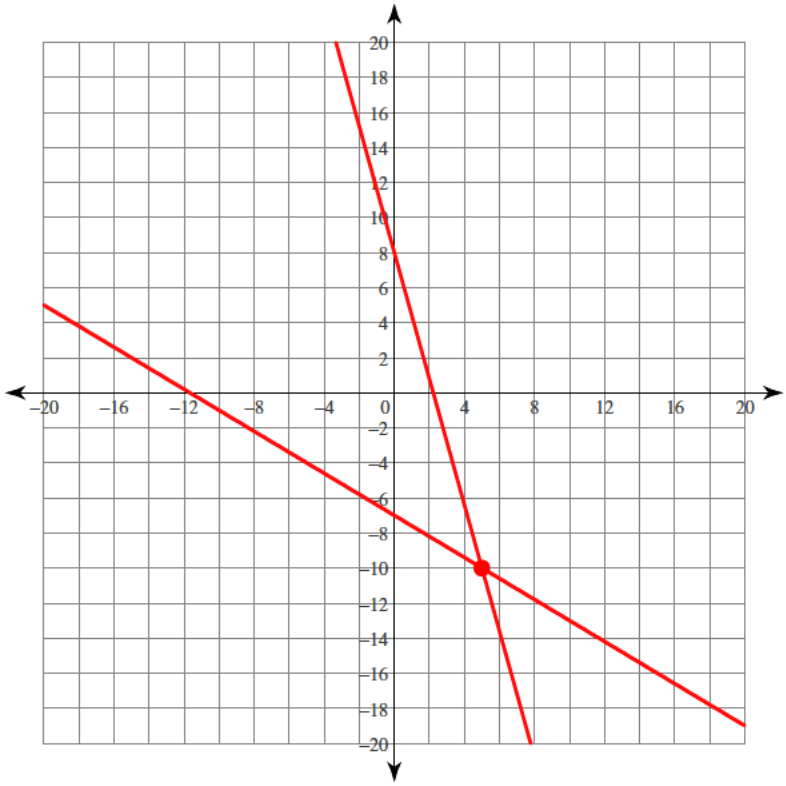
$-13x - 18y + 108 = 0$



(–18, 19)

385) $-40 = -18x - 5y$

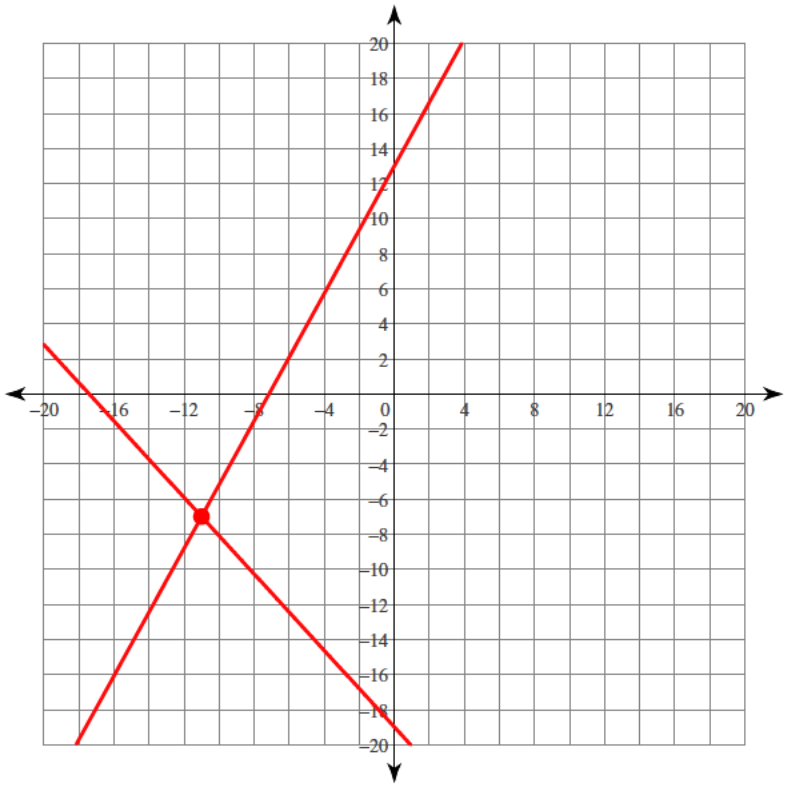
$-70 = 10y + 6x$



(5, –10)

386) $\frac{11}{12}y = -x - \frac{209}{12}$

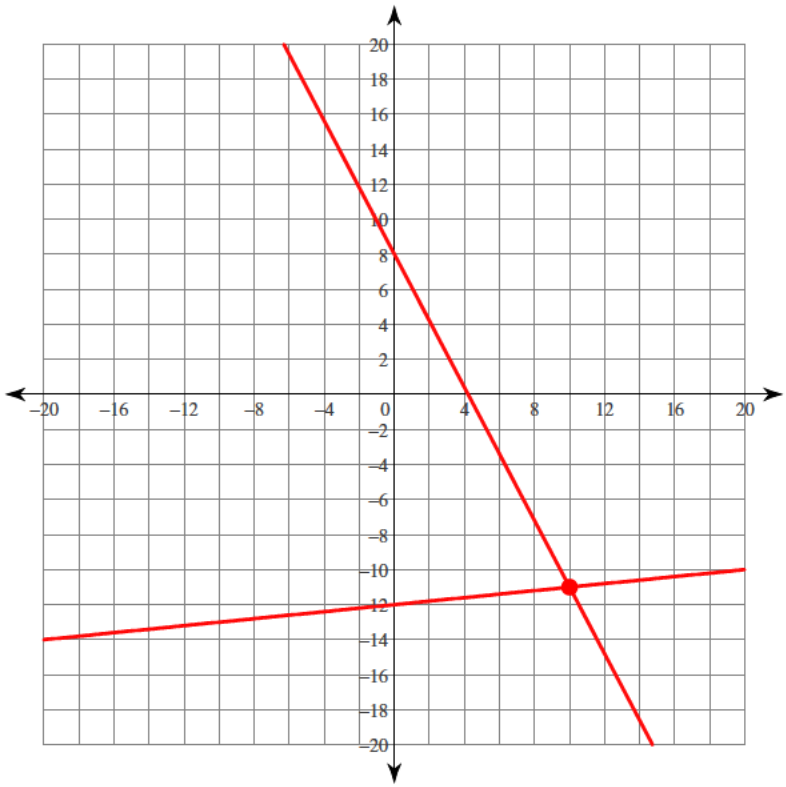
$0 = 429 - 33y + 60x$



(–11, –7)

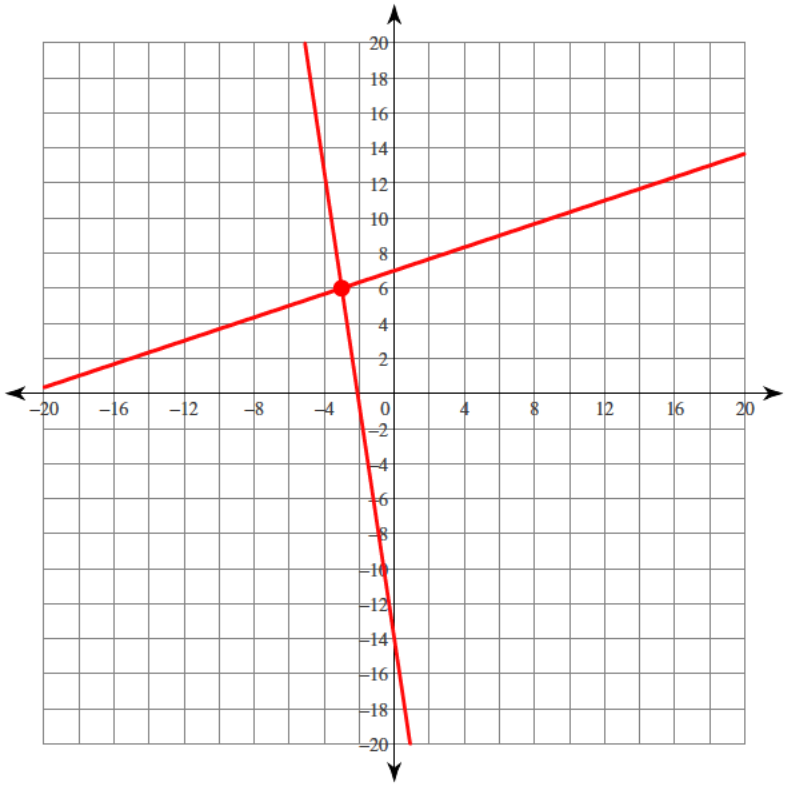
387) $0 = 80 - 19x - 10y$

$-x = -120 - 10y$



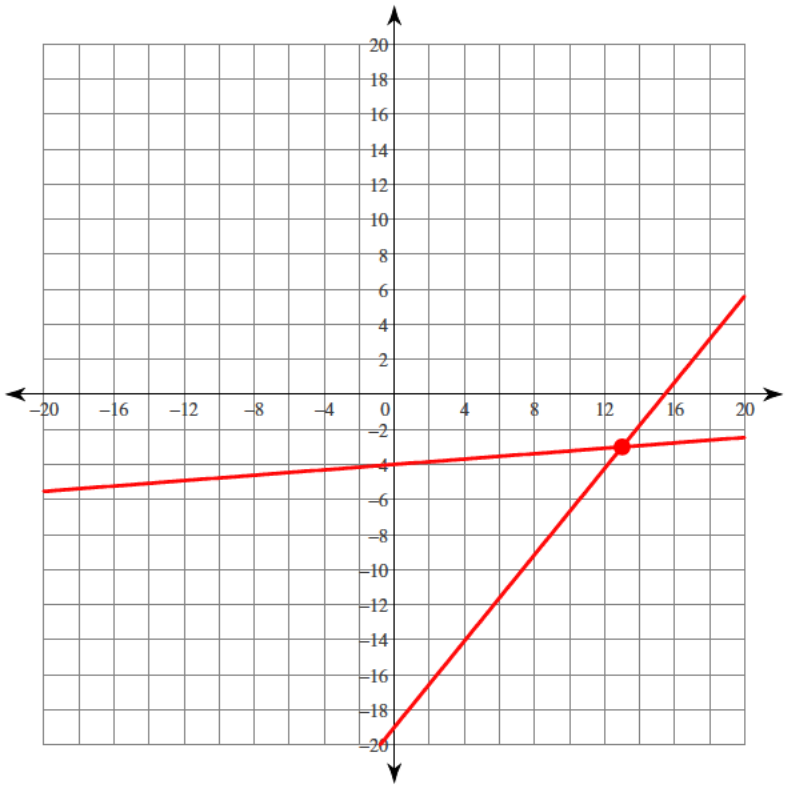
(10, –11)

388) $3x = -63 + 9y$
$3y = -42 - 20x$



$(-3, 6)$

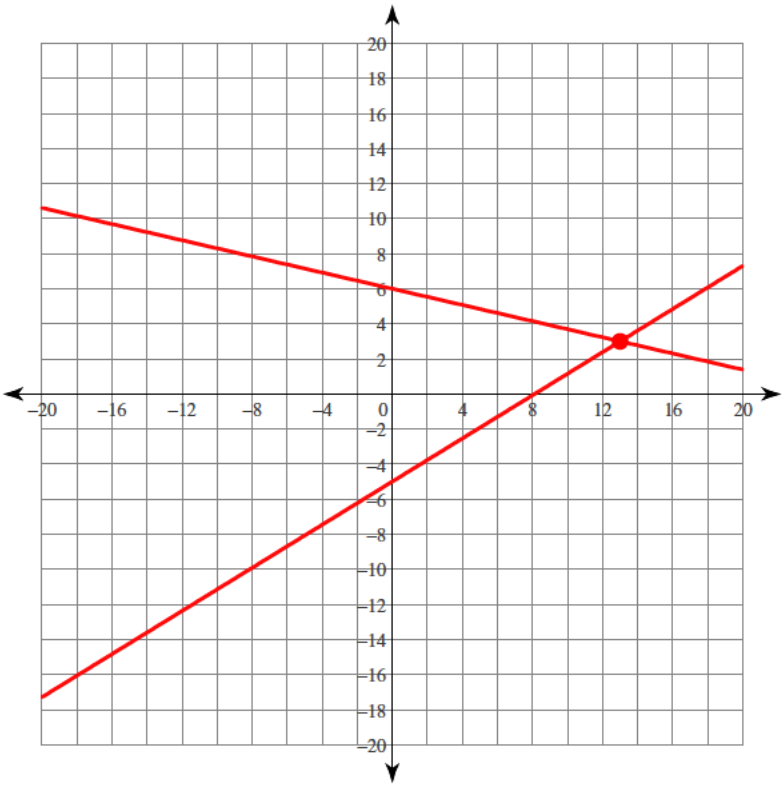
389) $2 - \frac{32}{247}x + \frac{2}{19}y = 0$
$-x + 13y = -52$



$(13, -3)$

390) $\frac{3}{5}y - \frac{24}{65}x = -3$

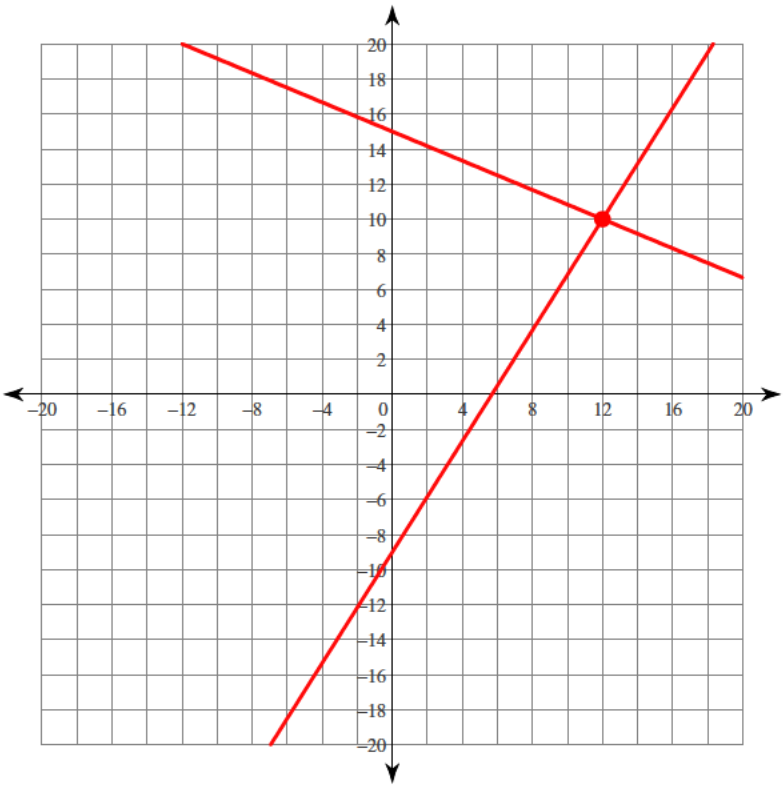
$0 = -78 + 3x + 13y$



(13, 3)

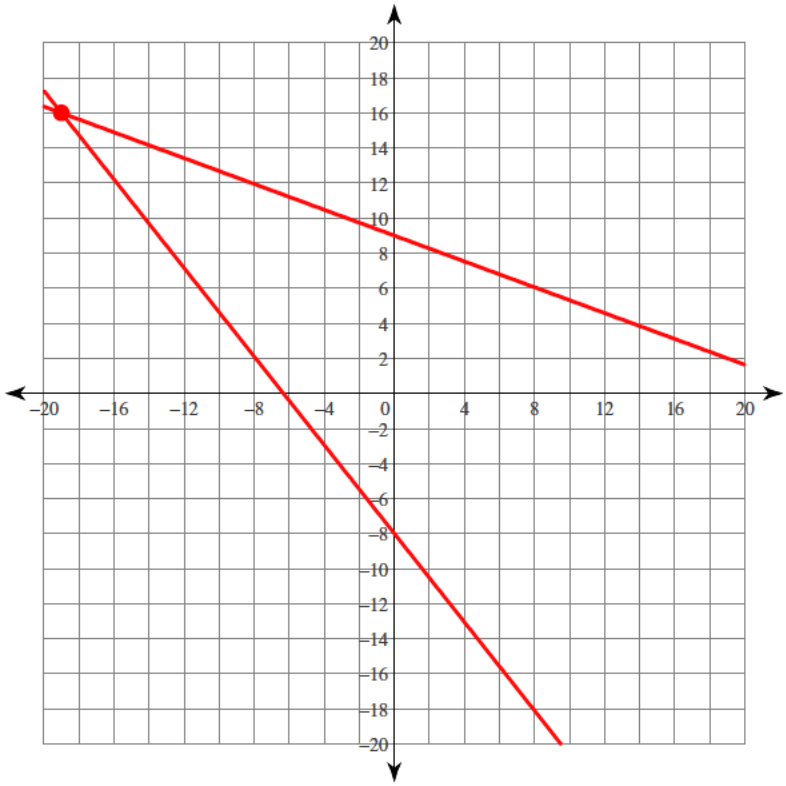
391) $-5x - 12y = -180$

$0 = 108 - 19x + 12y$



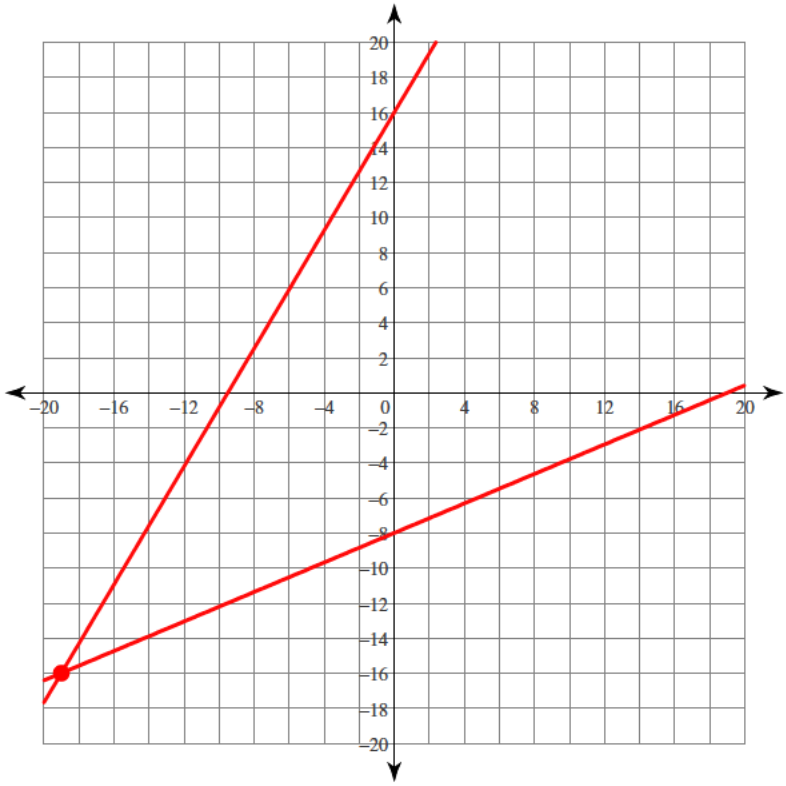
(12, 10)

392) $19y = -7x + 171$
$-19y = 152 + 24x$



(–19, 16)

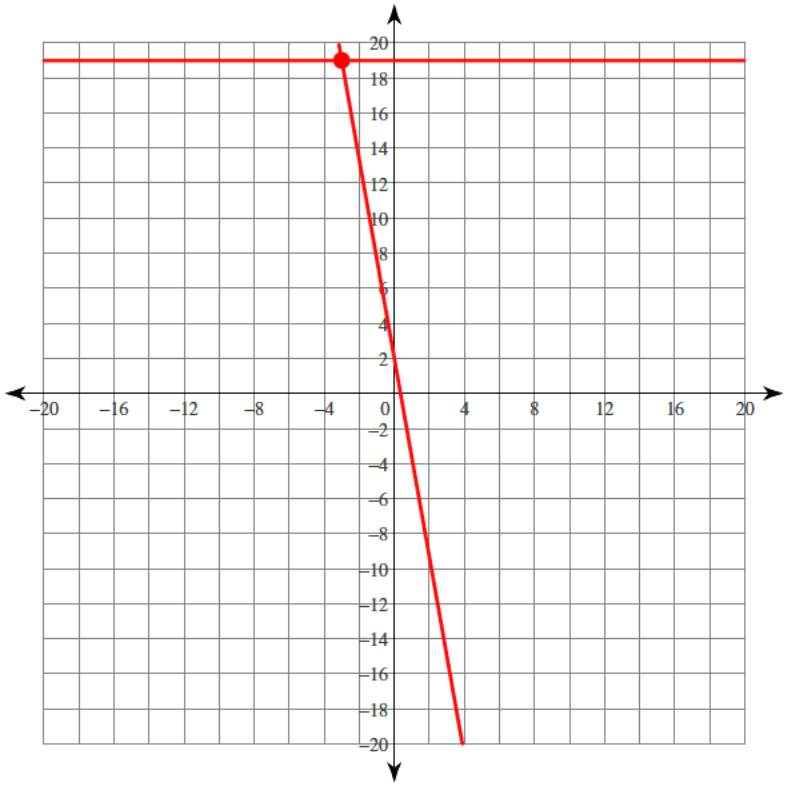
393) $19y = 304 + 32x$
$152 - 8x + 19y = 0$



(–19, –16)

394) $3y - 6 = -17x$

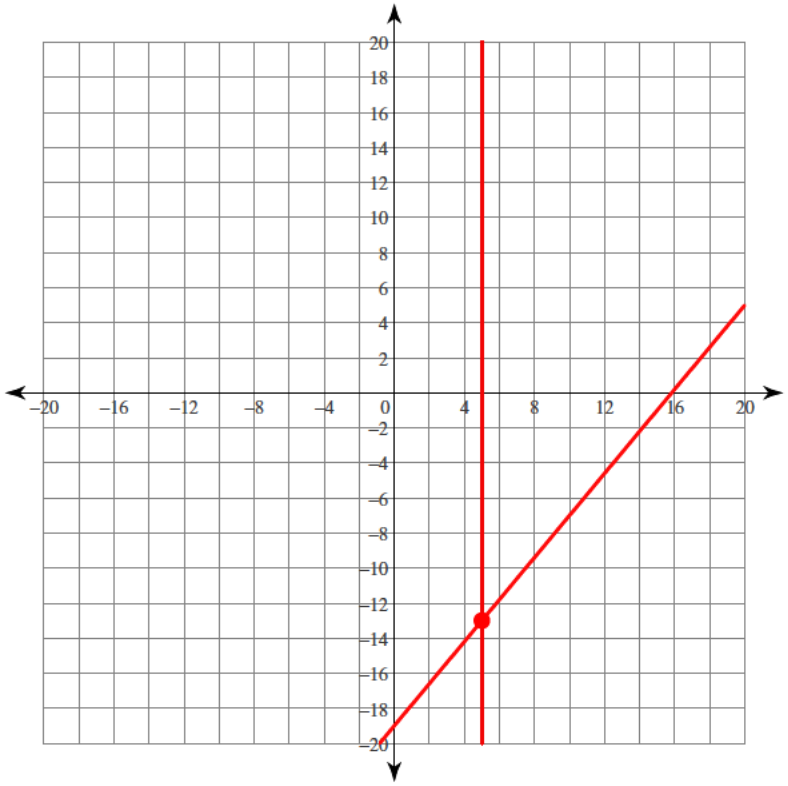
$y = 19$



(–3, 19)

395) $95 + 5y = 6x$

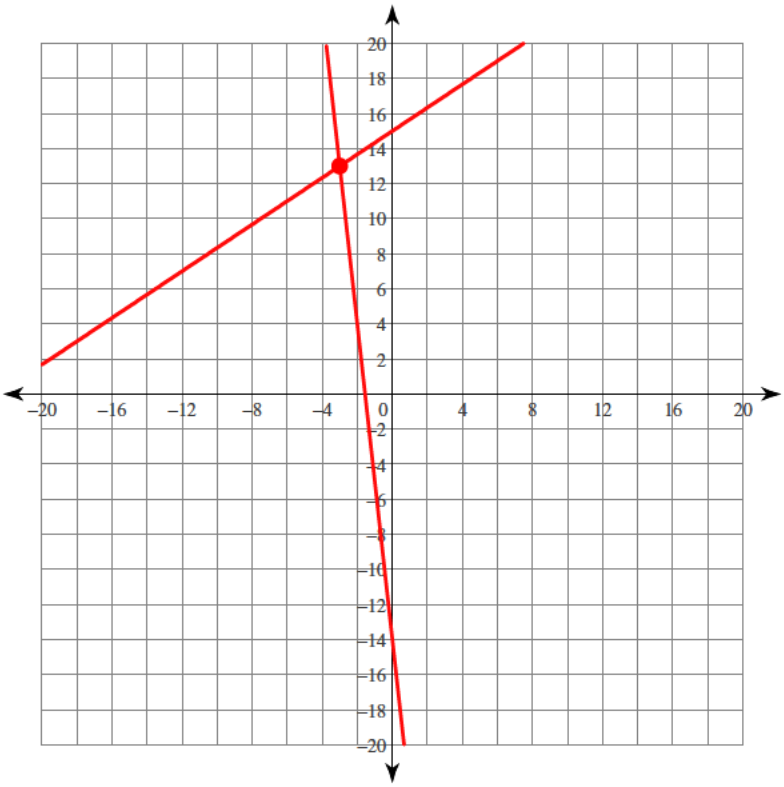
$-x = -5$



(5, –13)

396) $-\frac{1}{7}y = 2 + \frac{9}{7}x$

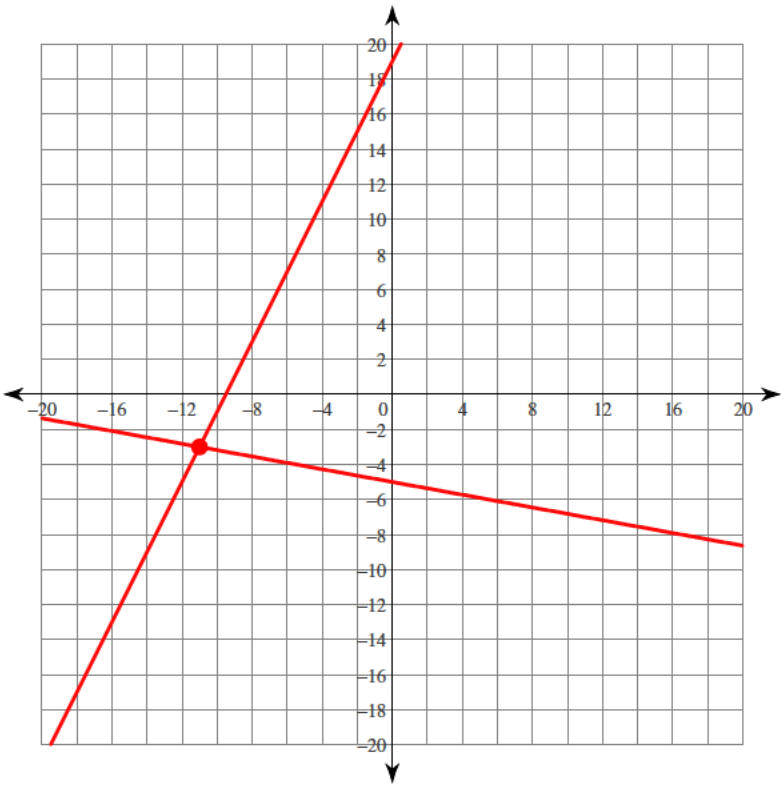
$90 = 6y - 4x$



(–3, 13)

397) $2x - y = -19$

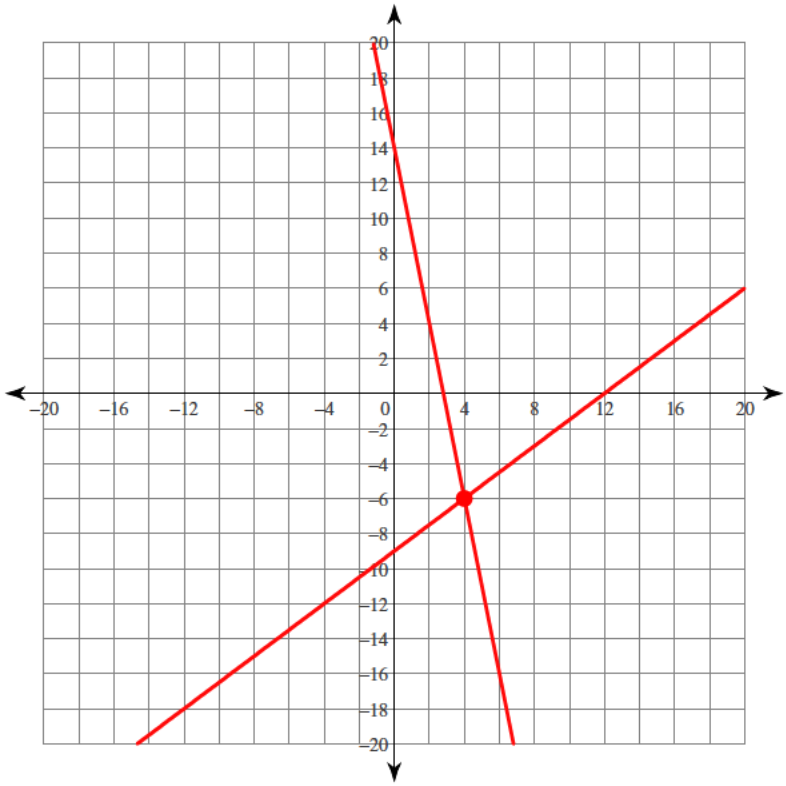
$2x + 11y + 55 = 0$



(–11, –3)

398) $14 - 5x = y$

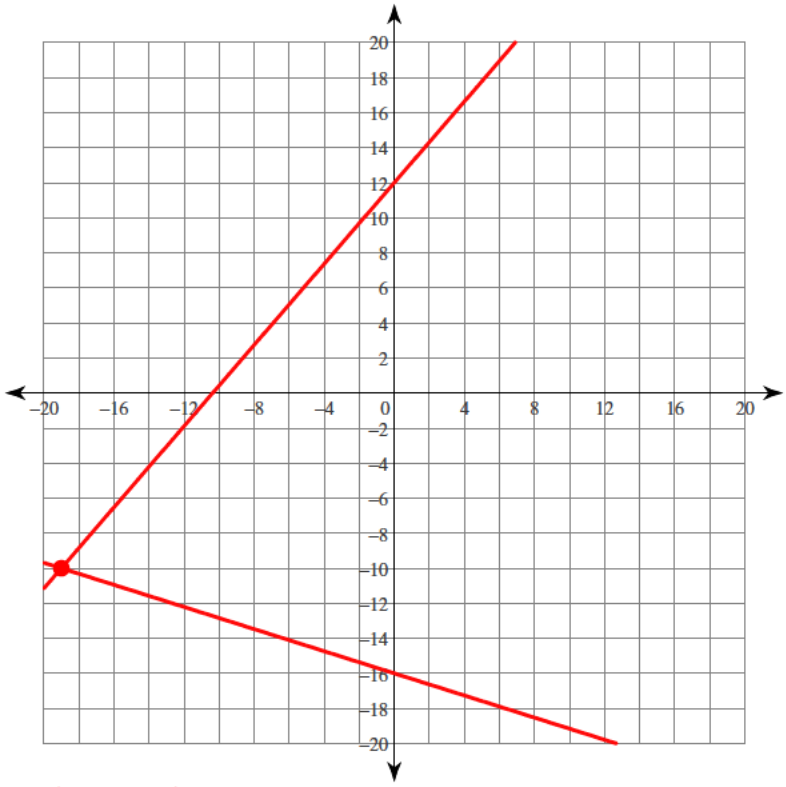
$-36 + 3x = 4y$



(4, –6)

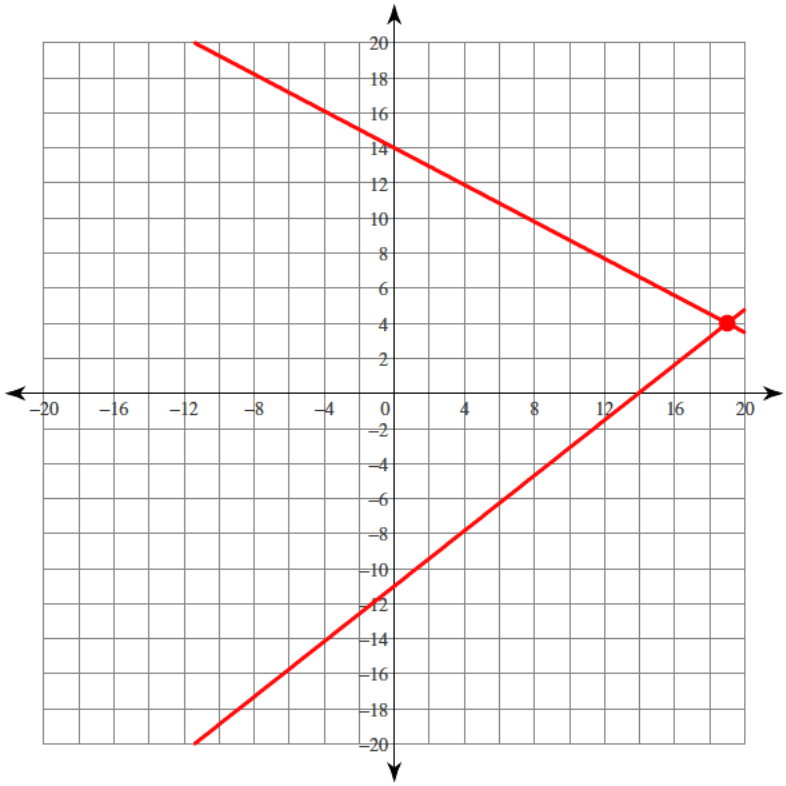
399) $-\frac{3}{152}x = 1 + \frac{1}{16}y$

$2 - \frac{1}{6}y + \frac{11}{57}x = 0$



(–19, –10)

400) $19y = -209 + 15x$
$20x - 532 + 38y = 0$



$(19, 4)$