

Systems of linear equations

Find both x- and y- coordinates of the solution to each system using substitution.

$$\begin{aligned} 1) \quad & 2y + 4 = -3x \\ & 0 = -x + y - 3 \end{aligned}$$

$$\begin{aligned} 2) \quad & 0 = -x - 2 + y \\ & -2y - 2 + \frac{1}{2}x = 0 \end{aligned}$$

$$\begin{aligned} 3) \quad & -2x - 8y = 8 \\ & 0 = x - 2y - 8 \end{aligned}$$

$$\begin{aligned} 4) \quad & -3y = -9 - x \\ & 0 = -6y - 18 - 10x \end{aligned}$$

$$\begin{aligned} 5) \quad & 6 = -x + 2y \\ & 4x - y = 4 \end{aligned}$$

$$\begin{aligned} 6) \quad & -12 = 6x + 3y \\ & 1 = y + \frac{1}{3}x \end{aligned}$$

$$\begin{aligned} 7) \quad & -3 + 2x = -3y \\ & 0 = 6 + 3y - x \end{aligned}$$

$$\begin{aligned} 8) \quad & -y = 4 \\ & -3x - 1 = y \end{aligned}$$

$$\begin{aligned} 9) \quad & -y = -4 + 2x \\ & -2y = 8 - 12x \end{aligned}$$

$$\begin{aligned} 10) \quad & -\frac{1}{2} = x + \frac{1}{2}y \\ & -y - 4 + x = 0 \end{aligned}$$

$$\begin{aligned} 11) \quad & -3x = -2y - 4 \\ & -8 + 2y + 3x = 0 \end{aligned}$$

$$\begin{aligned} 12) \quad & -2 = -x + y \\ & 6x - y = -3 \end{aligned}$$

$$\begin{aligned} 13) \quad & 4y - 8 + x = 0 \\ & 7x + 16 = -4y \end{aligned}$$

$$\begin{aligned} 14) \quad & x - 4y = -12 \\ & 6x - 4y - 8 = 0 \end{aligned}$$

$$\begin{aligned} 15) \quad & -2y + 2 = -3x \\ & 4 = -x - y \end{aligned}$$

$$\begin{aligned} 16) \quad & -4 + y = -2x \\ & -3 - y + 5x = 0 \end{aligned}$$

$$\begin{aligned} 17) \quad & -\frac{2}{3}x = -1 + \frac{1}{4}y \\ & -6 = 3y + 2x \end{aligned}$$

$$\begin{aligned} 18) \quad & -2y - 3x = 8 \\ & 3x = -4 + 2y \end{aligned}$$

$$\begin{aligned} 19) \quad & -3y - 12 - 9x = 0 \\ & -x = -y + 4 \end{aligned}$$

$$\begin{aligned} 20) \quad & 24 = -21x + 6y \\ & 4 + 2y - x = 0 \end{aligned}$$

$$\begin{aligned} 21) \quad & 0 = -y + 3 - 3x \\ & 3x - 24 = 6y \end{aligned}$$

$$\begin{aligned} 22) \quad & -y - 4x = 1 \\ & 4 + x = y \end{aligned}$$

$$\begin{aligned} 23) \quad & 2x - 1 = -y \\ & 4 + 2y + x = 0 \end{aligned}$$

$$\begin{aligned} 24) \quad & 0 = 3 - 5x - y \\ & 2x - 6 = 2y \end{aligned}$$

$$\begin{aligned} 25) \quad & 0 = -3 - x - y \\ & 8 = -x + 4y \end{aligned}$$

$$\begin{aligned} 26) \quad & 7x = -3 - y \\ & -3 + y = -x \end{aligned}$$

$$27) \begin{aligned} -9x &= -12y - 48 \\ 0 &= -8 + 4y + 3x \end{aligned}$$

$$28) \begin{aligned} 4y - 5x &= -16 \\ -\frac{1}{6}x &= -1 + \frac{1}{3}y \end{aligned}$$

$$29) \begin{aligned} 0 &= -6 - 2y + x \\ -9x + 6y &= -6 \end{aligned}$$

$$30) \begin{aligned} 0 &= 6 + 3y - x \\ 6 &= 2y - 4x \end{aligned}$$

$$31) \begin{aligned} 3x &= -12y + 36 \\ 4y - 3x &= -4 \end{aligned}$$

$$32) \begin{aligned} -y + \frac{1}{2}x &= 3 \\ y + x &= 3 \end{aligned}$$

$$33) \begin{aligned} -6 &= -3y + x \\ y &= 2x - 3 \end{aligned}$$

$$34) \begin{aligned} x &= y - 3 \\ -y + 7x - 3 &= 0 \end{aligned}$$

$$35) \begin{aligned} -x &= -\frac{1}{2}y + \frac{3}{2} \\ -9 &= 12x + 3y \end{aligned}$$

$$36) \begin{aligned} -3x &= 9 - 3y \\ -1 &= -y \end{aligned}$$

$$37) \begin{aligned} 36 + 12y &= 3x \\ 3x + 4y - 4 &= 0 \end{aligned}$$

$$38) \begin{aligned} 0 &= 8 - x + 4y \\ -1 &= \frac{1}{2}x - \frac{1}{3}y \end{aligned}$$

$$39) \begin{aligned} 3x &= 12y + 24 \\ 3x - 8 &= -4y \end{aligned}$$

$$40) \begin{aligned} y &= -8x + 4 \\ y + x &= -3 \end{aligned}$$

$$41) \begin{aligned} 6 + 3y &= -4x \\ 3y - 2x - 12 &= 0 \end{aligned}$$

$$42) \begin{aligned} y - 2 &= x \\ \frac{7}{4}x &= 1 + \frac{1}{4}y \end{aligned}$$

$$43) \begin{aligned} x &= -2y + 2 \\ 0 &= -16 - x + 4y \end{aligned}$$

$$44) \begin{aligned} -y + 5x + 2 &= 0 \\ -y &= 2 - x \end{aligned}$$

$$45) \begin{aligned} 2y - 4 &= -x \\ -3 + 2x &= y \end{aligned}$$

$$46) \begin{aligned} 3x - 4 &= 2y \\ 0 &= -36 - 3x + 12y \end{aligned}$$

$$47) \begin{aligned} 2 + 2y &= x \\ y &= 4 + 3x \end{aligned}$$

$$48) \begin{aligned} -2y - 6 &= -8x \\ -4 + 2x &= -2y \end{aligned}$$

$$49) \begin{aligned} -7x &= 3 - y \\ -2x + 2y + 6 &= 0 \end{aligned}$$

$$50) \begin{aligned} x + 4 &= -y \\ -2x - 3 &= -3y \end{aligned}$$

$$51) \begin{aligned} -1 - \frac{1}{12}x - \frac{1}{3}y &= 0 \\ x - 2 &= -\frac{1}{2}y \end{aligned}$$

$$52) \begin{aligned} -9 + 7x &= -3y \\ 9 + 3y &= -x \end{aligned}$$

$$53) 2x + y = -3$$

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

$$54) -5x = -4 + 2y$$

$$-4 - 2y = x$$

$$55) 3y = -24x - 12$$

$$-9 = -3y - 3x$$

$$56) -4 + 2x - y = 0$$

$$-12x + 6 - 3y = 0$$

$$57) 0 = y - 2x - 4$$

$$-x = -4 - 2y$$

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

$$-y - 4x = 4$$

$$59) 3x + y = 2$$

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

$$60) 1 - y = 0$$

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

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

$$0 = 2 + x - y$$

$$62) x - y = 1$$

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

$$63) 3y - 2x = -6$$

$$0 = -3y + 9 + 7x$$

$$64) 4 + x = 2y$$

$$-7x = -8 - 2y$$

$$65) y = -1$$

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

$$66) 36 + 21x - 9y = 0$$

$$-6 + x = 3y$$

$$67) -1 + 5x - y = 0$$

$$-x = -y + 3$$

$$68) -9 - 3x + 3y = 0$$

$$0 = y + 1 + x$$

$$69) -8y + 24 = -10x$$

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

$$70) -1 = -\frac{1}{2}y$$

$$y = -1 - x$$

$$71) -4y = 5x - 16$$

$$0 = -y - 1$$

$$72) 3y - 6 = -3x$$

$$9 + 3y = 2x$$

$$73) -x + 3 + y = 0$$

$$5x - y + 1 = 0$$

$$74) -3y = -12 - x$$

$$-3 = -2x - 3y$$

$$75) 4x + 1 - y = 0$$

$$-4 - 2y = -2x$$

$$76) -4 = y + 6x$$

$$-3 = x - y$$

$$77) -1 = \frac{1}{2}y$$

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

$$78) 0 = x - y - 1$$

$$-2 = -x$$

$$79) -4y = -12 + x$$

$$2y = -3x - 4$$

$$80) 0 = x - y + 1$$

$$-4 = -y - 2x$$

$$81) \begin{aligned} 0 &= 4 + x - 2y \\ 7x &= 4y + 12 \end{aligned}$$

$$82) \begin{aligned} 0 &= -x - 12 + 3y \\ -24 - 6y &= 14x \end{aligned}$$

$$83) \begin{aligned} 0 &= x + \frac{8}{3} + \frac{2}{3}y \\ -y &= -3 - 2x \end{aligned}$$

$$84) \begin{aligned} -9 + 7x &= -3y \\ 0 &= 3 + x + \frac{3}{2}y \end{aligned}$$

$$85) \begin{aligned} 5x &= 3y - 12 \\ 3y &= -2x - 9 \end{aligned}$$

$$86) \begin{aligned} 0 &= x - 3 \\ -x &= -12 - 3y \end{aligned}$$

$$87) \begin{aligned} y - \frac{1}{2}x &= -3 \\ 5x - 6 &= -2y \end{aligned}$$

$$88) \begin{aligned} 7x + 4 &= -y \\ -1 + \frac{1}{2}y + \frac{1}{2}x &= 0 \end{aligned}$$

$$89) \begin{aligned} -2y - 2 &= -x \\ x &= -4y + 8 \end{aligned}$$

$$90) \begin{aligned} -2x - y &= -1 \\ 2x &= 3 + y \end{aligned}$$

$$91) \begin{aligned} -4 - y &= 0 \\ 0 &= 3y - 6x - 12 \end{aligned}$$

$$92) \begin{aligned} -3 + y &= -x \\ y &= -3 - 7x \end{aligned}$$

$$93) \begin{aligned} x &= 9 - 3y \\ 0 &= -x + y + 1 \end{aligned}$$

$$94) \begin{aligned} -9y &= -15x - 9 \\ 3x - 9y &= 27 \end{aligned}$$

$$95) \begin{aligned} 0 &= 9 - 3y - 4x \\ 4 + y &= x \end{aligned}$$

$$96) \begin{aligned} 0 &= 18 + 9x - 6y \\ -2 - 2y &= -x \end{aligned}$$

$$97) \begin{aligned} 3y + 12 &= 7x \\ 3y - 12 + x &= 0 \end{aligned}$$

$$98) \begin{aligned} 2 &= y + x \\ -8y &= 8 + 2x \end{aligned}$$

$$99) \begin{aligned} 0 &= -5x + 2y + 4 \\ 0 &= x + 2y - 8 \end{aligned}$$

$$100) \begin{aligned} -1 - \frac{1}{4}y + \frac{3}{8}x &= 0 \\ -2y - 3x &= -4 \end{aligned}$$

$$101) \begin{aligned} 6 + y &= 2x \\ 0 &= -y - 2 \end{aligned}$$

$$102) \begin{aligned} -4y &= 12 + x \\ -4y + 20 &= 5x \end{aligned}$$

$$103) \begin{aligned} 5y - 14x &= 30 \\ 0 &= -35 + x - 5y \end{aligned}$$

$$104) \begin{aligned} y + 2x &= -6 \\ -84 &= -14y - 4x \end{aligned}$$

$$105) \begin{aligned} x - 12 + 4y &= 0 \\ 8y &= -72 + 22x \end{aligned}$$

$$106) \begin{aligned} 3y + 3 + 9x &= 0 \\ 8 &= x + 2y \end{aligned}$$

$$107) \begin{aligned} 48 + 22x &= 12y \\ 6y + x &= -48 \end{aligned}$$

$$108) \begin{aligned} 27 &= -3y + \frac{15}{7}x \\ 0 &= -84 + 24x + 21y \end{aligned}$$

$$\begin{aligned}109) \quad & -3y - 27 = -11x \\& 0 = -9 + 3y + x\end{aligned}$$

$$\begin{aligned}110) \quad & y - 8 = x \\& -y = 6x + 6\end{aligned}$$

$$\begin{aligned}111) \quad & -6 + \frac{5}{2}x = y \\& 3y - 18 + \frac{21}{2}x = 0\end{aligned}$$

$$\begin{aligned}112) \quad & 27 + 3y = -x \\& -2x + 2 = -2y\end{aligned}$$

$$\begin{aligned}113) \quad & 8y + 15x = -48 \\& 8y - 48 + 3x = 0\end{aligned}$$

$$\begin{aligned}114) \quad & -21y - 42 - 6x = 0 \\& -112 + 24x + 14y = 0\end{aligned}$$

$$\begin{aligned}115) \quad & -8x = -18 - 2y \\& 0 = 4x + 3y - 21\end{aligned}$$

$$\begin{aligned}116) \quad & x + 6 + y = 0 \\& 8x = 14y - 70\end{aligned}$$

$$\begin{aligned}117) \quad & x = 3y - 21 \\& 0 = 3 - 3y - 5x\end{aligned}$$

$$\begin{aligned}118) \quad & 0 = -y + 9 \\& -4y + 12 - 3x = 0\end{aligned}$$

$$\begin{aligned}119) \quad & -20 = 4y - 3x \\& 9 - x = y\end{aligned}$$

$$\begin{aligned}120) \quad & -63 = 7y + 3x \\& 13x = 7y - 49\end{aligned}$$

$$\begin{aligned}121) \quad & 3x - 9 + y = 0 \\& -8 = -7x + 2y\end{aligned}$$

$$\begin{aligned}122) \quad & -12 + 5x = -6y \\& -x = -6y - 24\end{aligned}$$

$$\begin{aligned}123) \quad & -2x = -9y - 63 \\& -9y + 11x = -18\end{aligned}$$

$$\begin{aligned}124) \quad & 0 = -9 + y - \frac{2}{3}x \\& 6y + 4x = 30\end{aligned}$$

$$\begin{aligned}125) \quad & 0 = -9 + y - \frac{15}{8}x \\& -32 + 2x - 8y = 0\end{aligned}$$

$$\begin{aligned}126) \quad & -5x - 2y = -18 \\& -2y + 8x = 8\end{aligned}$$

$$\begin{aligned}127) \quad & x = -6 + 3y \\& -\frac{1}{5}y = 1 + \frac{2}{5}x\end{aligned}$$

$$\begin{aligned}128) \quad & -24 + x = -4y \\& -2y + x = -18\end{aligned}$$

$$\begin{aligned}129) \quad & 3y + 4x = 12 \\& 0 = x - 9\end{aligned}$$

$$\begin{aligned}130) \quad & 0 = -2x - 3y + 6 \\& \frac{1}{8}x = 1 + \frac{1}{8}y\end{aligned}$$

$$\begin{aligned}131) \quad & 8y - 3x = -16 \\& \frac{1}{7}y - \frac{3}{14}x = 1\end{aligned}$$

$$\begin{aligned}132) \quad & y - 2x = -9 \\& 0 = 5 + 5y - 2x\end{aligned}$$

$$\begin{aligned}133) \quad & 0 = -10y - 16x + 60 \\& -1 - \frac{1}{3}y = -\frac{1}{15}x\end{aligned}$$

$$\begin{aligned}134) \quad & 30 - 5y = 2x \\& 5y + 15 + 11x = 0\end{aligned}$$

$$135) -3x = -8 + y$$
$$0 = x - \frac{1}{2}y + \frac{3}{2}$$

$$136) -5y = -30 + 7x$$
$$2x - 15 - 5y = 0$$

$$137) 2x = \frac{54}{11} - \frac{18}{11}y$$
$$243 = -27y + 3x$$

$$138) 9 = 3y - 3x$$
$$4x = -2 - y$$

$$139) 14x = -81 + 9y$$
$$6x - 27y - 81 = 0$$

$$140) -10 = -7x + 5y$$
$$10y = 60 - 2x$$

$$141) 96 + 24y = -9x$$
$$-36 - 4y + x = 0$$

$$142) 2x = 1 - y$$
$$0 = y - 4 - x$$

$$143) 10 = 7x + 5y$$
$$5y = -x + 40$$

$$144) 2y = -x + 2$$
$$2y + 6 = x$$

$$145) -\frac{11}{63}x = 1 - \frac{1}{7}y$$
$$-1 - \frac{1}{8}y = \frac{1}{18}x$$

$$146) -15 = -3y - 2x$$
$$21 = -3y - 8x$$

$$147) -x = -12 + 3y$$
$$-54 = 3x - 6y$$

$$148) 0 = -4y - 3x - 4$$
$$0 = -7 - y$$

$$149) 9y + 2x + 9 = 0$$
$$9y = -10x + 63$$

$$150) -12y = 84 - 22x$$
$$18 + x = 6y$$

$$151) 4 = x + 2y$$
$$12 = 2y - 3x$$

$$152) 24 + 13x = 6y$$
$$-x = -3y - 21$$

$$153) -y = -9 - 3x$$
$$5 = x + y$$

$$154) 0 = 7 - y - 2x$$
$$-y + x = 2$$

$$155) 7y - 3x + 63 = 0$$
$$-7y - 5x = 7$$

$$156) -2x - y = 2$$
$$7 = -x + y$$

$$157) -7 + 7y = -6x$$
$$x - 42 = 7y$$

$$158) 0 = x + 1 + y$$
$$9x - 7 = -y$$

$$159) y - 7 = 0$$
$$3x - 4 = -4y$$

$$160) 5 = 2x + y$$
$$-5x + y + 9 = 0$$

$$161) 5x + 27 = 3y$$
$$3y + 18 = -10x$$

$$162) 7y + 28 - 4x = 0$$
$$-7y + 56 + 16x = 0$$

$$163) \begin{aligned} 112 + 14y &= 2x \\ 0 &= y - 2 - \frac{11}{7}x \end{aligned}$$

$$164) \begin{aligned} \frac{17}{81}x + \frac{1}{9}y &= -1 \\ 15 &= 3y + x \end{aligned}$$

$$165) \begin{aligned} 0 &= -y + 2 \\ -y &= -8 + 3x \end{aligned}$$

$$166) \begin{aligned} -4y - 2x &= 8 \\ -54 &= 6y - 4x \end{aligned}$$

$$167) \begin{aligned} 5y &= -15 - x \\ -y &= 9 + \frac{7}{5}x \end{aligned}$$

$$168) \begin{aligned} -8 + 4y &= -3x \\ 14 &= 2y - x \end{aligned}$$

$$169) \begin{aligned} -3x + 6y &= -24 \\ y &= 8 + 2x \end{aligned}$$

$$170) \begin{aligned} -5y &= -45 + 13x \\ -4 &= y \end{aligned}$$

$$171) \begin{aligned} -5x - 3y - 21 &= 0 \\ 63 &= x + 9y \end{aligned}$$

$$172) \begin{aligned} 1 - \frac{1}{3}y &= \frac{4}{9}x \\ -24 + 7x &= 3y \end{aligned}$$

$$173) \begin{aligned} 6x + 72 - 8y &= 0 \\ -7x &= 2y + 16 \end{aligned}$$

$$174) \begin{aligned} -5x - 36 &= -9y \\ 5x &= 3y + 18 \end{aligned}$$

$$175) \begin{aligned} 0 &= -1 + y - x \\ -6 &= -10x + 2y \end{aligned}$$

$$176) \begin{aligned} -15 + 24x - 3y &= 0 \\ -y &= -4 + x \end{aligned}$$

$$177) \begin{aligned} 0 &= -6 - x + 2y \\ 12 + 4y &= -x \end{aligned}$$

$$178) \begin{aligned} 16 + 9x &= 8y \\ 64 + 8y &= -x \end{aligned}$$

$$179) \begin{aligned} -x &= -9 \\ -3y + 9 &= -2x \end{aligned}$$

$$180) \begin{aligned} 0 &= -32 + 5x - 4y \\ x &= -4y - 8 \end{aligned}$$

$$181) \begin{aligned} -9x &= 7y - 56 \\ 3x &= 7y + 28 \end{aligned}$$

$$182) \begin{aligned} 0 &= -x + 8y - 32 \\ 5x + 16 &= -8y \end{aligned}$$

$$183) \begin{aligned} -1 - \frac{13}{63}x + \frac{1}{7}y &= 0 \\ -63 - x &= 9y \end{aligned}$$

$$184) \begin{aligned} 0 &= 3y - 21 - \frac{3}{5}x \\ -x - y + 1 &= 0 \end{aligned}$$

$$185) \begin{aligned} -5y - 35 &= 14x \\ -40 + 10y &= -6x \end{aligned}$$

$$186) \begin{aligned} 96 + 16y &= -6x \\ -20 &= -7x - 4y \end{aligned}$$

$$187) \begin{aligned} 0 &= 36 - 7x + 4y \\ -20 + 4y + 7x &= 0 \end{aligned}$$

$$188) \begin{aligned} 1 + y + x &= 0 \\ -3x + 6y - 12 &= 0 \end{aligned}$$

$$189) \begin{aligned} 7y &= 8x - 28 \\ 56 &= 4x + 7y \end{aligned}$$

$$190) \begin{aligned} 3y + 8x &= -27 \\ x + 3y - 15 &= 0 \end{aligned}$$

$$191) \quad 2x - \frac{126}{13} + \frac{18}{13}y = 0$$

$$-x + 63 = -9y$$

$$192) \quad 90 = 20x + 18y$$

$$9y = -x - 36$$

$$193) \quad x - 7y - 63 = 0$$

$$3y + 6x = 18$$

$$194) \quad \frac{1}{3}y = -x - \frac{5}{3}$$

$$2y - 5x = 12$$

$$195) \quad -9y + 21x - 81 = 0$$

$$6 = y + \frac{8}{3}x$$

$$196) \quad 28 + 4y = x$$

$$-4y + 36 - 7x = 0$$

$$197) \quad -y - 3 = 8x$$

$$x = y - 6$$

$$198) \quad 7y + 6x = -14$$

$$7y + 63 = x$$

$$199) \quad 0 = 6 + 2x + y$$

$$-147 = -21y - 3x$$

$$200) \quad -27 + 3y = -10x$$

$$3y = 5x - 18$$

$$201) \quad 204 + 12y - 45x = 0$$

$$-12y = -60 + 21x$$

$$202) \quad 20x = 19y + 361$$

$$-18x = -361 + 19y$$

$$203) \quad 0 = y - 5$$

$$0 = -7 - y + 3x$$

$$204) \quad 11x = 12y - 228$$

$$1 - \frac{7}{12}x = y$$

$$205) \quad x + 2y - 26 = 0$$

$$8 - y + \frac{3}{4}x = 0$$

$$206) \quad -5x - 156 = -12y$$

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

$$207) \quad 0 = 11 - y - \frac{1}{4}x$$

$$-\frac{31}{4}x = 51 + 3y$$

$$208) \quad 110 + 5x + 11y = 0$$

$$-44 + 11y = -19x$$

$$209) \quad -48 = 6y - 5x$$

$$12y = -228 - x$$

$$210) \quad 16x = -11y + 88$$

$$-11y - 77 = x$$

$$211) \quad -15 = 3y$$

$$-12y + 144 = -51x$$

$$212) \quad -20 + 2y - 11x = 0$$

$$52 + x = -4y$$

$$213) \quad -2y + 32 = -6x$$

$$65 = -5y - 14x$$

$$214) \quad 0 = 76 + 19y - 9x$$

$$-19y - 9x + 266 = 0$$

$$215) \quad -3y - 7x = -45$$

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

$$216) \quad -13x = 19y - 209$$

$$-16x = -342 - 19y$$

$$\begin{aligned} 217) \quad & 72 + 12y = -17x \\ & -7x = -12y + 216 \end{aligned}$$

$$\begin{aligned} 218) \quad & -3y + 15 = -10x \\ & -x - 3y = -48 \end{aligned}$$

$$\begin{aligned} 219) \quad & -33 = -21x - 11y \\ & -176 = 2x + 11y \end{aligned}$$

$$\begin{aligned} 220) \quad & 13y + 22x = -52 \\ & -15x - 39y = -507 \end{aligned}$$

$$\begin{aligned} 221) \quad & 6x = 5y + 85 \\ & -195 + 15y = -27x \end{aligned}$$

$$\begin{aligned} 222) \quad & 0 = y - 4x - 12 \\ & 0 = 6x + 70 + 5y \end{aligned}$$

$$\begin{aligned} 223) \quad & -110 = 11y + x \\ & 33y = -99 - 24x \end{aligned}$$

$$\begin{aligned} 224) \quad & y + 8 - \frac{7}{13}x = 0 \\ & -13y - 234 = 3x \end{aligned}$$

$$\begin{aligned} 225) \quad & 40 + 5y = -13x \\ & y - 15 = 2x \end{aligned}$$

$$\begin{aligned} 226) \quad & 5y = -70 - 12x \\ & -18x = -5y + 80 \end{aligned}$$

$$\begin{aligned} 227) \quad & 0 = -17x + 342 - 18y \\ & -2x - 36y + 108 = 0 \end{aligned}$$

$$\begin{aligned} 228) \quad & 18y - 180 = -2x \\ & 7x - 54 = 9y \end{aligned}$$

$$\begin{aligned} 229) \quad & -13 + y = -x \\ & -y = -11 \end{aligned}$$

$$\begin{aligned} 230) \quad & 2y = 36 \\ & 21x - 2y = 6 \end{aligned}$$

$$\begin{aligned} 231) \quad & 13 + 13y = 17x \\ & -2x + 13y + 208 = 0 \end{aligned}$$

$$\begin{aligned} 232) \quad & 19 - 2x = -y \\ & 20 - 2y = 25x \end{aligned}$$

$$\begin{aligned} 233) \quad & 1 - \frac{1}{7}y = \frac{3}{14}x \\ & x - 26 = 2y \end{aligned}$$

$$\begin{aligned} 234) \quad & y = 5 + \frac{8}{7}x \\ & x - \frac{112}{3} = \frac{14}{3}y \end{aligned}$$

$$\begin{aligned} 235) \quad & -y = 13 + \frac{4}{7}x \\ & -91 = 9x - 7y \end{aligned}$$

$$\begin{aligned} 236) \quad & 0 = -y + 5 + \frac{5}{9}x \\ & 0 = 16 + y - \frac{31}{18}x \end{aligned}$$

$$\begin{aligned} 237) \quad & 15 = 5y + 2x \\ & -40 - 10y = -3x \end{aligned}$$

$$\begin{aligned} 238) \quad & -18x = -80 - 20y \\ & 5y = -x + 35 \end{aligned}$$

$$\begin{aligned} 239) \quad & x + 3y - 18 = 0 \\ & 0 = -30 - 13x - 6y \end{aligned}$$

$$\begin{aligned} 240) \quad & y = 16 + \frac{7}{3}x \\ & -38 - 7x - 2y = 0 \end{aligned}$$

$$\begin{aligned} 241) \quad & 255 = 17y - 3x \\ & -21x = -51 - 17y \end{aligned}$$

$$\begin{aligned} 242) \quad & -x = -84 + 6y \\ & 11x - 24 = -6y \end{aligned}$$

$$243) \quad x = 2$$

$$2y = -38 + x$$

$$244) \quad 2y = 8x - 30$$

$$-8 = 3x + y$$

$$245) \quad 714 = 6x + 51y$$

$$0 = -17y - 17 + 13x$$

$$246) \quad -408 = -51y - 66x$$

$$51y + 15x = -459$$

$$247) \quad -3y = 21 - 6x$$

$$-33x = -18 + 3y$$

$$248) \quad 0 = 2y + x + 30$$

$$-14y + 14 = -9x$$

$$249) \quad 10x + 9y - 108 = 0$$

$$0 = 9 - x$$

$$250) \quad -y = 16 + \frac{15}{14}x$$

$$-12 + 2y = x$$

$$251) \quad 120 + 15y = -13x$$

$$40 - 5y = -x$$

$$252) \quad -9y = x - 90$$

$$27y - 39x = -108$$

$$253) \quad -x - \frac{7}{30}y = \frac{21}{5}$$

$$7y = 3x + 105$$

$$254) \quad 14y = 266 + 2x$$

$$-y = 10 + 4x$$

$$255) \quad 160 + 7x + 16y = 0$$

$$y + \frac{17}{8}x = 17$$

$$256) \quad -9 = 4x - 3y$$

$$-4x + 9y = 99$$

$$257) \quad -3 - \frac{3}{10}y = -\frac{6}{35}x$$

$$-7y + 7 = -15x$$

$$258) \quad -96 - 16y = 5x$$

$$-16 = -x$$

$$259) \quad y = -19x + 11$$

$$-y = 10 - 2x$$

$$260) \quad -4x = 15y + 75$$

$$-x + y = 14$$

$$261) \quad 2y - 8 = -x$$

$$-528 = -21x + 48y$$

$$262) \quad 15y - 15 = -x$$

$$-3y = 2x + 24$$

$$263) \quad -60 = -2x - 10y$$

$$-9y = 99 + 12x$$

$$264) \quad -8 = -4y + 5x$$

$$-8y = 7x - 152$$

$$265) \quad y + \frac{7}{19}x = -2$$

$$12x = -323 + 19y$$

$$266) \quad x - 2y = -30$$

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

$$267) \quad 120 + 8y = x$$

$$-56 - 8y = 7x$$

$$268) \quad -x + 4y - 76 = 0$$

$$-1 = -\frac{1}{2}y - \frac{13}{32}x$$

$$269) \begin{aligned} 128 + 27x &= 8y \\ -36 - 4y + x &= 0 \end{aligned}$$

$$270) \begin{aligned} \frac{112}{3} + \frac{8}{3}y &= x \\ -y &= -18 - \frac{35}{8}x \end{aligned}$$

$$271) \begin{aligned} 4y &= 56 + 9x \\ 5x + 8 &= 8y \end{aligned}$$

$$272) \begin{aligned} -14 &= 3x - y \\ 4x + 14 &= -y \end{aligned}$$

$$273) \begin{aligned} -2 + \frac{1}{22}x &= \frac{2}{11}y \\ -3x + 20 &= 4y \end{aligned}$$

$$274) \begin{aligned} -144 - 8y &= 15x \\ 0 &= y - 12 \end{aligned}$$

$$275) \begin{aligned} -14x + 225 + 15y &= 0 \\ -240 &= -17x - 15y \end{aligned}$$

$$276) \begin{aligned} -20x &= 77 + 7y \\ -y &= -10 - \frac{1}{7}x \end{aligned}$$

$$277) \begin{aligned} 17 &= -y + \frac{23}{15}x \\ \frac{15}{2} &= -x + \frac{15}{4}y \end{aligned}$$

$$278) \begin{aligned} 20 + 2y + 2x &= 0 \\ 210 - 21y &= 81x \end{aligned}$$

$$279) \begin{aligned} 0 &= x + 2y - 22 \\ 105x &= -768 - 48y \end{aligned}$$

$$280) \begin{aligned} -7y &= -133 + 29x \\ -21y &= 294 - 12x \end{aligned}$$

$$281) \begin{aligned} -3y + 2x &= 3 \\ -20x + 9y &= 117 \end{aligned}$$

$$282) \begin{aligned} -x &= \frac{1}{12}y - \frac{1}{4} \\ 0 &= 2x + 17 - y \end{aligned}$$

$$283) \begin{aligned} -6x + 8 &= -4y \\ -8y + x &= 104 \end{aligned}$$

$$284) \begin{aligned} 5x + 36 &= 9y \\ -27 - 9y &= 2x \end{aligned}$$

$$285) \begin{aligned} -35 + x &= 5y \\ 45y &= -48x + 540 \end{aligned}$$

$$286) \begin{aligned} 2y - 32 - 8x &= 0 \\ 0 &= y + 3x - 9 \end{aligned}$$

$$287) \begin{aligned} -90 &= -45y + 3x \\ 15y + 9x &= 180 \end{aligned}$$

$$288) \begin{aligned} -2x + 7y - 35 &= 0 \\ 0 &= -84 - 14y + 15x \end{aligned}$$

$$289) \begin{aligned} -1 + \frac{1}{7}y - \frac{1}{7}x &= 0 \\ y &= 18 + 12x \end{aligned}$$

$$290) \begin{aligned} 0 &= 15x + 17y - 17 \\ 17y &= 255 - x \end{aligned}$$

$$291) \begin{aligned} -3x + 238 &= -17y \\ -\frac{187}{28} &= x - \frac{17}{28}y \end{aligned}$$

$$292) \begin{aligned} -y - 4x &= -10 \\ 2y &= -28 \end{aligned}$$

$$\begin{aligned}293) \quad 0 &= 15 + 3y + x \\0 &= 5 - y - 2x\end{aligned}$$

$$\begin{aligned}294) \quad 25x &= -255 + 17y \\-2x - \frac{34}{3}y &= \frac{442}{3}\end{aligned}$$

$$\begin{aligned}295) \quad 18 - y - x &= 0 \\-51x + 6 &= 3y\end{aligned}$$

$$\begin{aligned}296) \quad 3y &= -45 + 7x \\4x - 21 + 3y &= 0\end{aligned}$$

$$\begin{aligned}297) \quad 126 &= -10x - 9y \\117 - 9y + 17x &= 0\end{aligned}$$

$$\begin{aligned}298) \quad 10y + 23x + 140 &= 0 \\8 &= 2y + x\end{aligned}$$

$$\begin{aligned}299) \quad -144 &= -9y + 13x \\-1 - \frac{2}{15}x &= \frac{1}{15}y\end{aligned}$$

$$\begin{aligned}300) \quad 0 &= 14y + 3x - 126 \\-1 = -y + \frac{5}{14}x &\end{aligned}$$

$$\begin{aligned}301) \quad 2y - x &= 6 \\0 &= -4 + 4x - y\end{aligned}$$

$$\begin{aligned}302) \quad 0 &= -4 + 4y + 3x \\0 &= -2x + 24 + 8y\end{aligned}$$

$$\begin{aligned}303) \quad -10x - 6y + 24 &= 0 \\6 &= x - 3y\end{aligned}$$

$$\begin{aligned}304) \quad -x &= 3 - y \\-y + 8x &= 4\end{aligned}$$

$$\begin{aligned}305) \quad 2x &= -3 + y \\6x + 3y &= -3\end{aligned}$$

$$\begin{aligned}306) \quad \frac{4}{3} + \frac{1}{3}y &= -x \\-6 + 6y + 3x &= 0\end{aligned}$$

$$\begin{aligned}307) \quad 6y - 2x &= -12 \\-27 &= -9y - 12x\end{aligned}$$

$$\begin{aligned}308) \quad -6x + 9 &= 9y \\6y + 14x &= -24\end{aligned}$$

$$\begin{aligned}309) \quad -2 + x - y &= 0 \\-3y + 6 &= -15x\end{aligned}$$

$$\begin{aligned}310) \quad x + \frac{4}{3} - \frac{2}{3}y &= 0 \\4 + 2y &= x\end{aligned}$$

$$\begin{aligned}311) \quad x + 4y &= 8 \\0 &= 2x + 8\end{aligned}$$

$$\begin{aligned}312) \quad y &= -x - 3 \\-y &= -2 - 4x\end{aligned}$$

$$\begin{aligned}313) \quad 4 &= x \\0 &= 5x - 4 - 4y\end{aligned}$$

$$\begin{aligned}314) \quad -8 - 3x &= 2y \\3x - 2y &= -4\end{aligned}$$

$$\begin{aligned}315) \quad -8 &= -x - 2y \\12y &= -36 + 15x\end{aligned}$$

$$\begin{aligned}316) \quad 3x - \frac{9}{2} &= -\frac{3}{2}y \\-8 + 10x - 2y &= 0\end{aligned}$$

$$\begin{aligned}317) \quad 3y - 2x &= 3 \\y &= -x - 4\end{aligned}$$

$$\begin{aligned}318) \quad 9 - 3y - x &= 0 \\-y &= -x + 1\end{aligned}$$

$$\begin{aligned}319) \quad 4 + 7x + y &= 0 \\0 &= -3y - 3x + 6\end{aligned}$$

$$\begin{aligned}320) \quad -4 &= y \\-6x &= 3y + 6\end{aligned}$$

$$321) \frac{1}{12}x = -1 - \frac{1}{3}y$$

$$2y - 4 = -3x$$

$$323) 3x - 6 + 3y = 0$$

$$-x - 4 = -y$$

$$325) 4x = -y - 4$$

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

$$327) 0 = 8 - 4y - x$$

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

$$329) 3 = x - \frac{3}{2}y$$

$$-3y = -9 - 7x$$

$$331) 4 + y = -x$$

$$0 = -2 + y - 5x$$

$$333) 1 - y + \frac{2}{3}x = 0$$

$$-3y = x - 12$$

$$335) 3y = 12 + 9x$$

$$y + 1 + 2x = 0$$

$$337) -4 - 2y = 4x$$

$$x = -4 + y$$

$$339) 3 + y = -x$$

$$-2 + y = -6x$$

$$341) x = 1 - y$$

$$-4y + x = 16$$

$$343) -21x - 12y = 48$$

$$4 + x = 0$$

$$345) -1 - \frac{1}{4}y + \frac{1}{2}x = 0$$

$$-3y + x = -3$$

$$347) 36 - 21x = -12y$$

$$24 + 2x = 8y$$

$$322) 3y + 2x = -3$$

$$7x + 3y = 12$$

$$324) 0 = -2y + 6 - 5x$$

$$-x + 2y = -6$$

$$326) -4 = -2x + y$$

$$2y + 10x - 6 = 0$$

$$328) -4 - x = -4y$$

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

$$330) -y + 3 - 4x = 0$$

$$0 = 2x - 3 - y$$

$$332) 2y - 6 = 3x$$

$$-4y - 8 = -x$$

$$334) -y = -3$$

$$-2x + y + 1 = 0$$

$$336) 4 + 3x = 4y$$

$$-36 - 3x = 12y$$

$$338) 2y + 3x = 8$$

$$-4 = x + 4y$$

$$340) 4 - x = 4y$$

$$-2y = -x - 8$$

$$342) -3 + 3y = -2x$$

$$-3y = 12 - 3x$$

$$344) 4x = 2y + 2$$

$$0 = -2 + x + y$$

$$346) -3y - 9 - 3x = 0$$

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

$$348) -y - 2 = -4x$$

$$-1 = y - 4x$$

$$\begin{aligned}349) \quad & 5x - 2y = -6 \\& -y - 4 = x\end{aligned}$$

$$\begin{aligned}350) \quad & 9 = -x - 3y \\& 5x + 3y = 3\end{aligned}$$

$$\begin{aligned}351) \quad & -x + 4 = -y \\& 3 + y = 0\end{aligned}$$

$$\begin{aligned}352) \quad & -y + x = -4 \\& x = -\frac{1}{4}y - \frac{1}{4}\end{aligned}$$

$$\begin{aligned}353) \quad & -2x = -4 + y \\0 = & -x + \frac{2}{3} + \frac{1}{6}y\end{aligned}$$

$$\begin{aligned}354) \quad & -y - 4 = -x \\-6 + 3y = & -15x\end{aligned}$$

$$\begin{aligned}355) \quad & 12 + 6y = -3x \\-1 = & -\frac{7}{8}x - \frac{1}{4}y\end{aligned}$$

$$\begin{aligned}356) \quad & -3 = y + x \\4y = & 3x + 16\end{aligned}$$

$$\begin{aligned}357) \quad & -5x - 2y = 2 \\2y - 6 + x = & 0\end{aligned}$$

$$\begin{aligned}358) \quad & 16 - 3x = 4y \\0 = & -3x - 4y - 8\end{aligned}$$

$$\begin{aligned}359) \quad & y = -1 - x \\-15x + 9 = & 3y\end{aligned}$$

$$\begin{aligned}360) \quad & 0 = y - 1 - 2x \\-2x - y = & 3\end{aligned}$$

$$\begin{aligned}361) \quad & 3y - x = -6 \\2x - y = & -3\end{aligned}$$

$$\begin{aligned}362) \quad & 2y = x - 6 \\0 = & -2 - x\end{aligned}$$

$$\begin{aligned}363) \quad & y = -x - 4 \\0 = & 2x + 3 - 3y\end{aligned}$$

$$\begin{aligned}364) \quad & x - y = 1 \\-9 = & -x - 3y\end{aligned}$$

$$\begin{aligned}365) \quad & -3y + 12 = x \\x - \frac{6}{5} = & \frac{3}{5}y \\x + 6 = & 2y\end{aligned}$$

$$\begin{aligned}366) \quad & -\frac{4}{5}y = -x - \frac{8}{5} \\-x - 4y = & 16\end{aligned}$$

$$\begin{aligned}367) \quad & 3x - 3y = -9 \\x = & -y - 1\end{aligned}$$

$$\begin{aligned}368) \quad & 8 + 2x = -8y \\4y = & -x + 16\end{aligned}$$

$$\begin{aligned}369) \quad & -1 + \frac{5}{2}x = y \\x + 6 = & 2y\end{aligned}$$

$$\begin{aligned}370) \quad & 0 = -x - 4 + 2y \\2y + 6 - x = & 0\end{aligned}$$

$$\begin{aligned}371) \quad & x = 2 - y \\8 + 2y = & 2x\end{aligned}$$

$$\begin{aligned}372) \quad & y + 3 + x = 0 \\-5x - y + 1 = & 0\end{aligned}$$

$$\begin{aligned}373) \quad & -x = 9 - 3y \\-x - 1 = & y\end{aligned}$$

$$\begin{aligned}374) \quad & -y = 2x - 4 \\2x + 8y = & -24\end{aligned}$$

$$\begin{aligned}375) \quad & y + 2 = x \\-y = & x + 4\end{aligned}$$

$$\begin{aligned}376) \quad & -3 - 3y = -3x \\2y + 3x = & 8\end{aligned}$$

$$377) \begin{aligned} -x &= y + 1 \\ -1 - \frac{1}{16}x &= -\frac{1}{4}y \end{aligned}$$

$$378) \begin{aligned} 3x + 1 &= y \\ -3x + y &= -1 \end{aligned}$$

$$379) \begin{aligned} 2x &= -y + 2 \\ -2x &= 6y + 18 \end{aligned}$$

$$380) \begin{aligned} 3 - 2x - y &= 0 \\ 0 &= -2 - y + 3x \end{aligned}$$

$$381) \begin{aligned} 3 &= -2x + y \\ 2y &= -8 - 3x \end{aligned}$$

$$382) \begin{aligned} 12x - 2y &= -6 \\ -3y &= -9 - 18x \end{aligned}$$

$$383) \begin{aligned} -y + 5x &= 3 \\ -y + 3 - x &= 0 \end{aligned}$$

$$384) \begin{aligned} 4 &= -2y + 3x \\ -x &= -2y + 4 \end{aligned}$$

$$385) \begin{aligned} -6 &= 2y - 2x \\ 7x &= -3 + y \end{aligned}$$

$$386) \begin{aligned} 0 &= 5x - 4 + 2y \\ 2y &= -8 + x \end{aligned}$$

$$387) \begin{aligned} -8 &= 2x - 2y \\ 4x - 2 &= -2y \end{aligned}$$

$$388) \begin{aligned} 3x - 1 &= -y \\ 0 &= -4 - 3x - y \end{aligned}$$

$$389) \begin{aligned} 3x - 6 - 3y &= 0 \\ 4 + 4x &= y \end{aligned}$$

$$390) \begin{aligned} 9 - 3y &= 3x \\ -y - 8x &= 4 \end{aligned}$$

$$391) \begin{aligned} x - 4y + 8 &= 0 \\ 0 &= 2y + 2 + x \end{aligned}$$

$$392) \begin{aligned} 8 + 3x &= -2y \\ 2x + 8 &= -4y \end{aligned}$$

$$393) \begin{aligned} -15x + 12y &= 24 \\ 0 &= -5x - 16 + 4y \end{aligned}$$

$$394) \begin{aligned} -4 - \frac{8}{3}x &= -y \\ 0 &= -2x + 3y + 6 \end{aligned}$$

$$395) \begin{aligned} 6 &= -x + 3y \\ 3 - 4x &= -3y \end{aligned}$$

$$396) \begin{aligned} 0 &= -3y + 12 - \frac{3}{2}x \\ 0 &= 4 - 3x + 4y \end{aligned}$$

$$397) \begin{aligned} -x - 3 &= -y \\ -x - 4y &= 8 \end{aligned}$$

$$398) \begin{aligned} 0 &= -8x + 2y + 8 \\ 2 &= -x + y \end{aligned}$$

$$399) \begin{aligned} -16 &= -4y + 7x \\ 0 &= x - 2y - 2 \end{aligned}$$

$$400) \begin{aligned} -8 &= 3x - 2y \\ -8 &= 2y + x \end{aligned}$$

$$401) \begin{aligned} -4x &= 9y - 63 \\ -9y &= -11x + 72 \end{aligned}$$

$$402) \begin{aligned} -3y &= 3 - 7x \\ 0 &= 2x - 24 + 3y \end{aligned}$$

$$403) \begin{aligned} -y + 7x &= -1 \\ x &= -7 - y \end{aligned}$$

$$404) \begin{aligned} y + 8 &= -\frac{1}{5}x \\ 0 &= -15 - 6x - 5y \end{aligned}$$

$$405) \begin{aligned} -3y - x &= 15 \\ 8 - y &= -\frac{11}{6}x \end{aligned}$$

$$407) \begin{aligned} 0 &= -9x - 40 - 5y \\ -15y + 21x &= -120 \end{aligned}$$

$$409) \begin{aligned} 4y - 32 &= -17x \\ 32 + 4y &= -x \end{aligned}$$

$$411) \begin{aligned} -y - \frac{1}{3}x &= 1 \\ 7x + 36 &= -6y \end{aligned}$$

$$413) \begin{aligned} 7x - 8y &= 24 \\ 24 + x &= 8y \end{aligned}$$

$$415) \begin{aligned} y + 9 &= -2x \\ -26x - 32 + 4y &= 0 \end{aligned}$$

$$417) \begin{aligned} 3y + \frac{3}{2}x &= 27 \\ 18 + 2y - 17x &= 0 \end{aligned}$$

$$419) \begin{aligned} 3x &= -42 + 6y \\ 3y + 12 &= 18x \end{aligned}$$

$$421) \begin{aligned} 6 &= 2y - 7x \\ 2y &= x - 6 \end{aligned}$$

$$423) \begin{aligned} 4 - 4y &= -x \\ x &= -2y - 10 \end{aligned}$$

$$425) \begin{aligned} -7y - 28 + 10x &= 0 \\ 21y - 168 + 6x &= 0 \end{aligned}$$

$$427) \begin{aligned} 7 + \frac{11}{3}x &= y \\ x &= 3y + 9 \end{aligned}$$

$$429) \begin{aligned} -18 &= -2y \\ y - 17x + 8 &= 0 \end{aligned}$$

$$406) \begin{aligned} 0 &= -18 - 15x + 9y \\ 3 &= x \end{aligned}$$

$$408) \begin{aligned} -5x + 24 &= -4y \\ 0 &= -2y + 16 - x \end{aligned}$$

$$410) \begin{aligned} 3y &= 6x - 9 \\ 0 &= -y - 2x - 7 \end{aligned}$$

$$412) \begin{aligned} -7y &= 7 - x \\ 3x + 7y &= -35 \end{aligned}$$

$$414) \begin{aligned} 4 + 4y &= -7x \\ 0 &= 4 - x \end{aligned}$$

$$416) \begin{aligned} -9x - 24 &= -24y \\ 0 &= 2y + 12 + x \end{aligned}$$

$$418) \begin{aligned} 2 &= -x - 2y \\ \frac{5}{6}x &= y - 7 \end{aligned}$$

$$420) \begin{aligned} x &= -21 - 3y \\ 9y + 27 &= -15x \end{aligned}$$

$$422) \begin{aligned} 3x - \frac{21}{4}y + \frac{21}{4} &= 0 \\ -\frac{4}{63}x &= -1 + \frac{1}{9}y \end{aligned}$$

$$424) \begin{aligned} -14 &= 4x + 7y \\ -49 &= -7y + 5x \end{aligned}$$

$$426) \begin{aligned} 0 &= -2x + 6 \\ -y &= x + 4 \end{aligned}$$

$$428) \begin{aligned} 3x &= -21y - 168 \\ -6x - 21 &= 7y \end{aligned}$$

$$430) \begin{aligned} 4x &= -7 - 7y \\ -14y &= -70 - 4x \end{aligned}$$

$$\begin{aligned}431) \quad -11x &= -30 - 6y \\-18 &= -2y - x\end{aligned}$$

$$\begin{aligned}432) \quad 9 &= y \\0 &= y - 8 - x\end{aligned}$$

$$\begin{aligned}433) \quad -4y &= -24 - 9x \\0 &= -3x - 24 - 4y\end{aligned}$$

$$\begin{aligned}434) \quad 2y &= -10 - x \\2y - 18 &= -15x\end{aligned}$$

$$\begin{aligned}435) \quad 0 &= -2 - x - 2y \\18 + 3x + 2y &= 0\end{aligned}$$

$$\begin{aligned}436) \quad 27 - x - 3y &= 0 \\13x &= 6y + 36\end{aligned}$$

$$\begin{aligned}437) \quad -y &= 6 \\y &= 2 - 8x\end{aligned}$$

$$\begin{aligned}438) \quad 0 &= -y - 2 + \frac{7}{4}x \\x - 4y &= 32\end{aligned}$$

$$\begin{aligned}439) \quad -y &= x + 6 \\-x - 4y &= 12\end{aligned}$$

$$\begin{aligned}440) \quad -30 - 5y &= -13x \\5y - 3x &= 20\end{aligned}$$

$$\begin{aligned}441) \quad -6 + x &= 3y \\-81 + 8x &= -9y\end{aligned}$$

$$\begin{aligned}442) \quad -4y &= -8 + x \\x &= -y - 4\end{aligned}$$

$$\begin{aligned}443) \quad 4x - 4 &= y \\y &= x - 7\end{aligned}$$

$$\begin{aligned}444) \quad 9y &= -42x + 45 \\-1 - \frac{1}{8}y &= \frac{1}{24}x\end{aligned}$$

$$\begin{aligned}445) \quad -4x - 5y &= 30 \\-2 - y &= 0\end{aligned}$$

$$\begin{aligned}446) \quad 9y &= -81 + 10x \\x &= 6 + 3y\end{aligned}$$

$$\begin{aligned}447) \quad -x + 3y &= 24 \\-9y &= 72 + 13x\end{aligned}$$

$$\begin{aligned}448) \quad -8 - 2x - 2y &= 0 \\0 &= x - \frac{8}{3} - \frac{1}{3}y\end{aligned}$$

$$\begin{aligned}449) \quad 2x + 2y &= -18 \\-3y + 15 &= -39x\end{aligned}$$

$$\begin{aligned}450) \quad 0 &= -7x + 12 + 2y \\\frac{3}{5}y - \frac{9}{20}x &= 3\end{aligned}$$

$$\begin{aligned}451) \quad -7x &= 30 - 5y \\-25 - 4x &= 5y\end{aligned}$$

$$\begin{aligned}452) \quad 2y - x &= -2 \\\frac{1}{9}y &= -1 - \frac{1}{18}x\end{aligned}$$

$$\begin{aligned}453) \quad 8y - 11x &= -72 \\x &= -2y + 12\end{aligned}$$

$$\begin{aligned}454) \quad 3y &= 24 + x \\6x + 9 &= -9y\end{aligned}$$

$$\begin{aligned}455) \quad 9y &= -45 - x \\24 + 4x - 3y &= 0\end{aligned}$$

$$\begin{aligned}456) \quad x + 7 &= -y \\0 &= 1 + y\end{aligned}$$

$$457) \begin{aligned} 0 &= -9 - x - y \\ -\frac{13}{4}x &= 3 - \frac{1}{2}y \end{aligned}$$

$$458) \begin{aligned} 8y + 6x &= 72 \\ -8y + 9x &= 48 \end{aligned}$$

$$459) \begin{aligned} -y + 2x &= -1 \\ 8y &= 64 + 2x \end{aligned}$$

$$460) \begin{aligned} -27 &= -3y - x \\ -x - 3y &= 3 \end{aligned}$$

$$461) \begin{aligned} -\frac{8}{9}x + \frac{1}{9}y &= 1 \\ -2y - 12 &= -x \end{aligned}$$

$$462) \begin{aligned} -y &= 1 - 2x \\ 18 &= -2y - 12x \end{aligned}$$

$$463) \begin{aligned} -6x - 7y &= -63 \\ 0 &= y - 3 \end{aligned}$$

$$464) \begin{aligned} -y - 5 &= x \\ 3y - 21 &= -39x \end{aligned}$$

$$465) \begin{aligned} -3x &= -3y + 15 \\ x - \frac{1}{10}y - \frac{2}{5} &= 0 \end{aligned}$$

$$466) \begin{aligned} -y + 4x + 6 &= 0 \\ 0 &= -2x + 3y + 12 \end{aligned}$$

$$467) \begin{aligned} 12x - 9 - 3y &= 0 \\ 24 &= 3y - x \end{aligned}$$

$$468) \begin{aligned} 16 &= -3x + \frac{8}{3}y \\ 0 &= -4y - 20 - x \end{aligned}$$

$$469) \begin{aligned} -10x &= 6y - 48 \\ x &= -54 - 9y \end{aligned}$$

$$470) \begin{aligned} -x - \frac{21}{2} - \frac{3}{2}y &= 0 \\ 3 - 10x &= 3y \end{aligned}$$

$$471) \begin{aligned} 24 &= 2x + 3y \\ 6 - 3y &= 2x \end{aligned}$$

$$472) \begin{aligned} 6 &= y - x \\ 12x &= y + 5 \end{aligned}$$

$$473) \begin{aligned} 3y + 4x + 27 &= 0 \\ 0 &= 9y - 42x - 81 \end{aligned}$$

$$474) \begin{aligned} 2x &= -18 \\ -9y - 27 - x &= 0 \end{aligned}$$

$$475) \begin{aligned} -\frac{1}{12}x + \frac{1}{3}y &= 1 \\ 24y + 96 &= -15x \end{aligned}$$

$$476) \begin{aligned} 2x + 6 &= y \\ 3x - 27 &= -3y \end{aligned}$$

$$477) \begin{aligned} -2x + 8 &= -y \\ 30 &= x + 6y \end{aligned}$$

$$478) \begin{aligned} -7x - 9y &= -45 \\ \frac{7}{9}x &= 3 - y \end{aligned}$$

$$479) \begin{aligned} -2y + 10 &= -5x \\ x + 4y + 24 &= 0 \end{aligned}$$

$$480) \begin{aligned} 48 &= 16y - 2x \\ 0 &= -24 - 8y + x \end{aligned}$$

$$481) \begin{aligned} -18 &= 2y - x \\ y &= -7x + 6 \end{aligned}$$

$$482) \begin{aligned} -5x - 2y &= 8 \\ -y &= 8 + \frac{1}{2}x \end{aligned}$$

$$483) -35 + 12x = 5y$$
$$5y = 2x + 15$$

$$484) -4 - 2y + x = 0$$
$$3x = -8 + y$$

$$485) -15 = x - 3y$$
$$12 - 4x = -3y$$

$$486) 2x + 24 = 3y$$
$$7 + x + y = 0$$

$$487) -8x = y - 1$$
$$y - 8 = -x$$

$$488) -x = y + 7$$
$$7x = -1 - y$$

$$489) 7x - 5 - 5y = 0$$
$$25 - 5y = -x$$

$$490) 0 = 3x + \frac{27}{5}y - \frac{108}{5}$$
$$0 = 9 + y - \frac{8}{9}x$$

$$491) 4 - 2y = 18x$$
$$-9x + 2 = y$$

$$492) 3x = 5 + 5y$$
$$0 = -3x + 5y - 25$$

$$493) -2x = 9y - 9$$
$$-11x - 72 - 9y = 0$$

$$494) 0 = 4y - 7x + 4$$
$$-4y = -x - 20$$

$$495) -y - 16x - 7 = 0$$
$$-8 + y + x = 0$$

$$496) x = -14 - 2y$$
$$-3x + 30 = -6y$$

$$497) -108 = 12y - 34x$$
$$4 = y - \frac{2}{3}x$$

$$498) -\frac{9}{5}x = y + 1$$
$$0 = 35 - 5y - x$$

$$499) 2x - 6 = 6y$$
$$0 = -2x + \frac{3}{2}y - \frac{15}{2}$$

$$500) -27 - 27y = -12x$$
$$-9y - 5x = -72$$

$$501) \frac{1}{14}x = -1 + \frac{1}{14}y$$
$$4 + 2y = 18x$$

$$502) -4 = -21x - y$$
$$-2y = -24 + 42x$$

$$503) 119 + 7y = -2x$$
$$147 = -21y + 9x$$

$$504) -24 + 2y + x = 0$$
$$0 = x + \frac{14}{25}y + \frac{84}{25}$$

$$505) -6 = -4x - 3y$$
$$0 = -6x + 324 + 27y$$

$$506) -\frac{342}{11} - \frac{19}{11}y = -x$$
$$-19y - x = 114$$

$$507) 4x + 105 = -7y$$
$$6 - \frac{1}{14}x = -y$$

$$508) -8x + 18y = -144$$
$$-1 + \frac{1}{3}x = -\frac{1}{2}y$$

$$509) \begin{aligned} -6y - 108 &= -14x \\ -y &= -8 + \frac{5}{9}x \end{aligned}$$

$$510) \begin{aligned} -14 &= -4x - 7y \\ 7y &= -16x - 70 \end{aligned}$$

$$511) \begin{aligned} 7y + 22x + 63 &= 0 \\ -x + \frac{77}{2} - \frac{7}{2}y &= 0 \end{aligned}$$

$$512) \begin{aligned} -\frac{10}{323}x &= -1 + \frac{1}{19}y \\ 9 - y &= 0 \end{aligned}$$

$$513) \begin{aligned} -30x + 11 &= -y \\ -y - 11 + 30x &= 0 \end{aligned}$$

$$514) \begin{aligned} x + 12 &= -y \\ 3y &= -42 + 3x \end{aligned}$$

$$515) \begin{aligned} -323 &= -3x - 17y \\ 13x - 17y &= -51 \end{aligned}$$

$$516) \begin{aligned} 27x + 16y &= 160 \\ 16y + 160 &= -7x \end{aligned}$$

$$517) \begin{aligned} -2 - y &= -\frac{8}{15}x \\ -29x + 15y &= 285 \end{aligned}$$

$$518) \begin{aligned} -x + y + 8 &= 0 \\ -7 + y &= -14x \end{aligned}$$

$$519) \begin{aligned} 3y + 26x &= -54 \\ -13 - \frac{5}{3}x &= -y \end{aligned}$$

$$520) \begin{aligned} 210 &= -17x - 15y \\ -5y &= -45 - 2x \end{aligned}$$

$$521) \begin{aligned} 0 &= -165 - 15y - 8x \\ 210 &= 15y - 17x \end{aligned}$$

$$522) \begin{aligned} 14y - 10x - 210 &= 0 \\ 105 + 25x &= -7y \end{aligned}$$

$$523) \begin{aligned} 1 + \frac{1}{5}y &= \frac{9}{20}x \\ -x + 4y - 44 &= 0 \end{aligned}$$

$$524) \begin{aligned} x &= -8y + 120 \\ 8y + 17x &= -8 \end{aligned}$$

$$525) \begin{aligned} 11x &= 136 - 8y \\ 1 - \frac{3}{8}x &= -\frac{1}{3}y \end{aligned}$$

$$526) \begin{aligned} -120 - 8y &= -17x \\ -x &= -16y + 288 \end{aligned}$$

$$527) \begin{aligned} -16y + 224 - 27x &= 0 \\ 3x &= -8y - 56 \end{aligned}$$

$$528) \begin{aligned} -19y + 3x - 361 &= 0 \\ -x &= \frac{19}{33}y - \frac{323}{33} \end{aligned}$$

$$529) \begin{aligned} y + 7 &= 0 \\ 0 &= 128 - 16y + 15x \end{aligned}$$

$$530) \begin{aligned} 0 &= -30 + x - 6y \\ y &= 9 - x \end{aligned}$$

$$531) \begin{aligned} -x + 6y + 102 &= 0 \\ 24 + 4x &= -3y \end{aligned}$$

$$532) \begin{aligned} -16y &= -9x + 304 \\ 0 &= 1 - \frac{1}{15}y + \frac{3}{80}x \end{aligned}$$

$$533) \begin{aligned} 8y &= -144 + 21x \\ 8y &= 16 + x \end{aligned}$$

$$534) -y - x = 10$$
$$0 = -3 + \frac{1}{2}y$$

$$535) 7y = 77 - x$$
$$6x - 112 = -7y$$

$$536) y = 9 + x$$
$$x + 9 - y = 0$$

$$537) -9y = -162 - 31x$$
$$-7x = -54 - 9y$$

$$538) 0 = 270 - 15y - 34x$$
$$15y = -225 - x$$

$$539) -27x = 64 - 8y$$
$$4y - 3x = -52$$

$$540) -30y - 330 = -2x$$
$$-585 = -69x - 45y$$

$$541) x - \frac{2}{3} + \frac{2}{3}y = 0$$
$$1 = \frac{1}{13}y$$

$$542) 16x = -15y + 225$$
$$16x + 15y = 150$$

$$543) -18 + \frac{7}{5}x = -y$$
$$15y = 7x - 150$$

$$544) 2y = 14$$
$$1 = 6x + y$$

$$545) x + \frac{16}{7}y + \frac{64}{7} = 0$$
$$16y - 13x = 256$$

$$546) 0 = 1 + \frac{1}{6}y$$
$$-2y - 34 = 22x$$

$$547) -\frac{1}{7}y - \frac{3}{119}x = -1$$
$$17y - 289 = 7x$$

$$548) -\frac{85}{11} = -x - \frac{17}{11}y$$
$$-x - 17 = 0$$

$$549) x = -\frac{77}{2} + \frac{7}{2}y$$
$$-7y = 14 - 15x$$

$$550) 70 + 9x = -7y$$
$$7y = -126 - x$$

$$551) 0 = 14x - 18 - 9y$$
$$-3y = 39 - x$$

$$552) 3x - 57 = 3y$$
$$\frac{1}{19}x - \frac{1}{19}y = 1$$

$$553) 0 = -9y - 63 + 2x$$
$$126 - 9y = -23x$$

$$554) -2x = 4$$
$$2y + x = 6$$

$$555) 1 = \frac{1}{12}y + \frac{3}{28}x$$
$$6 = -y$$

$$556) 0 = -4x + 14y - 224$$
$$10 + \frac{24}{7}x = -y$$

$$557) 0 = -5x - 72 - 9y$$
$$x = \frac{9}{11}y - \frac{72}{11}$$

$$558) -x - \frac{1}{6}y = \frac{1}{3}$$

$$2 + y = -6x$$

$$559) -x = \frac{306}{31} + \frac{17}{31}y$$

$$-306 - 17y - 31x = 0$$

$$560) 9x = 224 - 14y$$

$$16 = -y + \frac{23}{14}x$$

$$561) -1 + 8x + y = 0$$

$$17 - y = 0$$

$$562) 0 = -180 - 23x + 18y$$

$$x = 216 + 18y$$

$$563) 14x = -3y + 36$$

$$0 = -6y - 5x - 66$$

$$564) -33 + x - 3y = 0$$

$$-23x + 84 = 6y$$

$$565) 10 + 4x = 5y$$

$$y + x = -16$$

$$566) -21x = 5y - 90$$

$$\frac{21}{5}x = -y + 18$$

$$567) 6x + 40 = -20y$$

$$10y - 80 = 7x$$

$$568) 0 = -96 + x - 6y$$

$$-36 = 18y - 17x$$

$$569) 5x = -13y + 117$$

$$-1 + \frac{2}{13}x = \frac{1}{4}y$$

$$570) 12x = -5y - 85$$

$$-10y - 3x = -40$$

$$571) -12x = -9y + 162$$

$$3y = -28x - 42$$

$$572) 0 = -29x + 13y + 247$$

$$-1 + \frac{1}{18}y = -\frac{4}{117}x$$

$$573) -x + 13y - 208 = 0$$

$$143 - 28x = -13y$$

$$574) 22x - 180 = 36y$$

$$-33x = -270 - 54y$$

$$575) -36 - 3y = 0$$

$$0 = -3y + 31x + 57$$

$$576) -3y + 34x = -45$$

$$x + \frac{39}{34} = \frac{3}{34}y$$

$$577) -4 = -2x - y$$

$$10y = -50 - 2x$$

$$578) -45 - x - 3y = 0$$

$$-8x = 63 - 9y$$

$$579) -19y + 17x = -266$$

$$-28x - 646 = 38y$$

$$580) 0 = 160 + 10y - 46x$$

$$-160 + 46x = 10y$$

$$581) 8x + 132 = 11y$$

$$22y = -66 - 14x$$

$$582) 0 = -5y + 7x - 30$$

$$0 = -1 + \frac{1}{9}y + \frac{8}{45}x$$

$$583) 6y = -108 + 16x$$

$$-27 = 3y - 8x$$

$$584) -11y = 15x + 44$$
$$y + 4 + \frac{15}{11}x = 0$$

$$585) x + \frac{11}{24}y + \frac{77}{24} = 0$$
$$-198 = -11y - 24x$$

$$586) -39 - 28x + 3y = 0$$
$$0 = -18 - x - y$$

$$587) 5x + 2y = -38$$
$$4y - 17x - 32 = 0$$

$$588) -\frac{36}{7} + \frac{4}{7}y = -x$$
$$21x = 36y + 684$$

$$589) -19y + 2x = 76$$
$$0 = 2x - 76 - 19y$$

$$590) 4y - 8 = -7x$$
$$0 = x + 64 + 4y$$

$$591) 190 + 19y = -11x$$
$$x + 38 = 19y$$

$$592) 7x = 36 + 4y$$
$$3x = 12$$

$$593) 8 - x = y$$
$$-2y + 7x = 20$$

$$594) 0 = 12y + 19x + 144$$
$$64 = -3x + 4y$$

$$595) -y = -3x + 1$$
$$-3x - 4 = -y$$

$$596) 0 = -x - 68 + 4y$$
$$4y - x = -32$$

$$597) 42 = 6y - 13x$$
$$-x + \frac{6}{13}y = \frac{42}{13}$$

$$598) \frac{5}{9}x - \frac{1}{3}y = 1$$
$$6y = -x + 114$$

$$599) 5x = -68 - 4y$$
$$\frac{17}{20}x = -1 + \frac{1}{5}y$$

$$600) 0 = -11y - 209 + 4x$$
$$11y + 4x = -121$$

Systems of linear equations

Find both x- and y- coordinates of the solution to each system using substitution.

$$1) \begin{aligned} 2y + 4 &= -3x \\ 0 &= -x + y - 3 \end{aligned}$$

$$(-2, 1)$$

$$2) \begin{aligned} 0 &= -x - 2 + y \\ -2y - 2 + \frac{1}{2}x &= 0 \end{aligned}$$

$$(-4, -2)$$

$$3) \begin{aligned} -2x - 8y &= 8 \\ 0 &= x - 2y - 8 \end{aligned}$$

$$(4, -2)$$

$$4) \begin{aligned} -3y &= -9 - x \\ 0 &= -6y - 18 - 10x \end{aligned}$$

$$(-3, 2)$$

$$5) \begin{aligned} 6 &= -x + 2y \\ 4x - y &= 4 \end{aligned}$$

$$(2, 4)$$

$$6) \begin{aligned} -12 &= 6x + 3y \\ 1 &= y + \frac{1}{3}x \end{aligned}$$

$$(-3, 2)$$

$$7) \begin{aligned} -3 + 2x &= -3y \\ 0 &= 6 + 3y - x \end{aligned}$$

$$(3, -1)$$

$$8) \begin{aligned} -y &= 4 \\ -3x - 1 &= y \end{aligned}$$

$$(1, -4)$$

$$9) \begin{aligned} -y &= -4 + 2x \\ -2y &= 8 - 12x \end{aligned}$$

$$(1, 2)$$

$$10) \begin{aligned} -\frac{1}{2} &= x + \frac{1}{2}y \\ -y - 4 + x &= 0 \end{aligned}$$

$$(1, -3)$$

$$11) \begin{aligned} -3x &= -2y - 4 \\ -8 + 2y + 3x &= 0 \end{aligned}$$

$$(2, 1)$$

$$12) \begin{aligned} -2 &= -x + y \\ 6x - y &= -3 \end{aligned}$$

$$(-1, -3)$$

$$13) \begin{aligned} 4y - 8 + x &= 0 \\ 7x + 16 &= -4y \end{aligned}$$

$$(-4, 3)$$

$$14) \begin{aligned} x - 4y &= -12 \\ 6x - 4y - 8 &= 0 \end{aligned}$$

$$(4, 4)$$

$$15) \begin{aligned} -2y + 2 &= -3x \\ 4 &= -x - y \end{aligned}$$

$$(-2, -2)$$

$$16) \begin{aligned} -4 + y &= -2x \\ -3 - y + 5x &= 0 \end{aligned}$$

$$(1, 2)$$

$$17) \begin{aligned} -\frac{2}{3}x &= -1 + \frac{1}{4}y \\ -6 &= 3y + 2x \end{aligned}$$

$$(3, -4)$$

$$18) \begin{aligned} -2y - 3x &= 8 \\ 3x &= -4 + 2y \end{aligned}$$

$$(-2, -1)$$

$$19) \begin{aligned} -3y - 12 - 9x &= 0 \\ -x &= -y + 4 \end{aligned}$$

$$(-2, 2)$$

$$20) \begin{aligned} 24 &= -21x + 6y \\ 4 + 2y - x &= 0 \end{aligned}$$

$$(-2, -3)$$

$$21) \begin{aligned} 0 &= -y + 3 - 3x \\ 3x - 24 &= 6y \end{aligned}$$

$$(2, -3)$$

$$22) \begin{aligned} -y - 4x &= 1 \\ 4 + x &= y \end{aligned}$$

$$(-1, 3)$$

$$23) \begin{aligned} 2x - 1 &= -y \\ 4 + 2y + x &= 0 \end{aligned}$$

$$(2, -3)$$

$$24) \begin{aligned} 0 &= 3 - 5x - y \\ 2x - 6 &= 2y \end{aligned}$$

$$(1, -2)$$

$$25) \begin{aligned} 0 &= -3 - x - y \\ 8 &= -x + 4y \end{aligned}$$

$$(-4, 1)$$

$$26) \begin{aligned} 7x &= -3 - y \\ -3 + y &= -x \end{aligned}$$

$$(-1, 4)$$

27) $-9x = -12y - 48$
 $0 = -8 + 4y + 3x$
 $(4, -1)$

28) $4y - 5x = -16$
 $-\frac{1}{6}x = -1 + \frac{1}{3}y$
 $(4, 1)$

29) $0 = -6 - 2y + x$
 $-9x + 6y = -6$
 $(-2, -4)$

30) $0 = 6 + 3y - x$
 $6 = 2y - 4x$
 $(-3, -3)$

31) $3x = -12y + 36$
 $4y - 3x = -4$
 $(4, 2)$

32) $-y + \frac{1}{2}x = 3$
 $y + x = 3$
 $(4, -1)$

33) $-6 = -3y + x$
 $y = 2x - 3$
 $(3, 3)$

34) $x = y - 3$
 $-y + 7x - 3 = 0$
 $(1, 4)$

35) $-x = -\frac{1}{2}y + \frac{3}{2}$
 $-9 = 12x + 3y$
 $(-1, 1)$

36) $-3x = 9 - 3y$
 $-1 = -y$
 $(-2, 1)$

37) $36 + 12y = 3x$
 $3x + 4y - 4 = 0$
 $(4, -2)$

38) $0 = 8 - x + 4y$
 $-1 = \frac{1}{2}x - \frac{1}{3}y$
 $(-4, -3)$

39) $3x = 12y + 24$
 $3x - 8 = -4y$
 $(4, -1)$

40) $y = -8x + 4$
 $y + x = -3$
 $(1, -4)$

41) $6 + 3y = -4x$
 $3y - 2x - 12 = 0$
 $(-3, 2)$

42) $y - 2 = x$
 $\frac{7}{4}x = 1 + \frac{1}{4}y$
 $(1, 3)$

43) $x = -2y + 2$
 $0 = -16 - x + 4y$
 $(-4, 3)$

44) $-y + 5x + 2 = 0$
 $-y = 2 - x$
 $(-1, -3)$

45) $2y - 4 = -x$
 $-3 + 2x = y$
 $(2, 1)$

46) $3x - 4 = 2y$
 $0 = -36 - 3x + 12y$
 $(4, 4)$

47) $2 + 2y = x$
 $y = 4 + 3x$
 $(-2, -2)$

48) $-2y - 6 = -8x$
 $-4 + 2x = -2y$
 $(1, 1)$

49) $-7x = 3 - y$
 $-2x + 2y + 6 = 0$
 $(-1, -4)$

50) $x + 4 = -y$
 $-2x - 3 = -3y$
 $(-3, -1)$

51) $-1 - \frac{1}{12}x - \frac{1}{3}y = 0$
 $x - 2 = -\frac{1}{2}y$
 $(4, -4)$

52) $-9 + 7x = -3y$
 $9 + 3y = -x$
 $(3, -4)$

$$53) 2x + y = -3$$

$$\begin{aligned} -1 + \frac{1}{2}y &= -\frac{1}{6}x \\ (-3, 3) \end{aligned}$$

$$55) 3y = -24x - 12$$
$$\begin{aligned} -9 &= -3y - 3x \\ (-1, 4) \end{aligned}$$

$$57) 0 = y - 2x - 4$$
$$\begin{aligned} -x &= -4 - 2y \\ (-4, -4) \end{aligned}$$

$$59) 3x + y = 2$$
$$\begin{aligned} 0 &= 3x - 4 - y \\ (1, -1) \end{aligned}$$

$$61) 4x - y = 4$$
$$\begin{aligned} 0 &= 2 + x - y \\ (2, 4) \end{aligned}$$

$$63) 3y - 2x = -6$$
$$\begin{aligned} 0 &= -3y + 9 + 7x \\ (-3, -4) \end{aligned}$$

$$65) y = -1$$
$$\begin{aligned} -3x + 2y &= -8 \\ (2, -1) \end{aligned}$$

$$67) -1 + 5x - y = 0$$
$$\begin{aligned} -x &= -y + 3 \\ (1, 4) \end{aligned}$$

$$69) -8y + 24 = -10x$$
$$\begin{aligned} 0 &= -4 + x - 4y \\ (-4, -2) \end{aligned}$$

$$71) -4y = 5x - 16$$
$$\begin{aligned} 0 &= -y - 1 \\ (4, -1) \end{aligned}$$

$$73) -x + 3 + y = 0$$
$$\begin{aligned} 5x - y + 1 &= 0 \\ (-1, -4) \end{aligned}$$

$$75) 4x + 1 - y = 0$$
$$\begin{aligned} -4 - 2y &= -2x \\ (-1, -3) \end{aligned}$$

$$77) -1 = \frac{1}{2}y$$
$$\begin{aligned} -2y + 6 &= -5x \\ (-2, -2) \end{aligned}$$

$$79) -4y = -12 + x$$
$$\begin{aligned} 2y &= -3x - 4 \\ (-4, 4) \end{aligned}$$

$$54) -5x = -4 + 2y$$

$$\begin{aligned} -4 - 2y &= x \\ (2, -3) \end{aligned}$$

$$56) -4 + 2x - y = 0$$
$$\begin{aligned} -12x + 6 - 3y &= 0 \\ (1, -2) \end{aligned}$$

$$58) x + 2y = 6$$
$$\begin{aligned} -y - 4x &= 4 \\ (-2, 4) \end{aligned}$$

$$60) 1 - y = 0$$
$$\begin{aligned} 8 &= -4y + 3x \\ (4, 1) \end{aligned}$$

$$62) x - y = 1$$
$$\begin{aligned} 0 &= -2x - 3y + 12 \\ (3, 2) \end{aligned}$$

$$64) 4 + x = 2y$$
$$\begin{aligned} -7x &= -8 - 2y \\ (2, 3) \end{aligned}$$

$$66) 36 + 21x - 9y = 0$$
$$\begin{aligned} -6 + x &= 3y \\ (-3, -3) \end{aligned}$$

$$68) -9 - 3x + 3y = 0$$
$$\begin{aligned} 0 &= y + 1 + x \\ (-2, 1) \end{aligned}$$

$$70) -1 = -\frac{1}{2}y$$
$$\begin{aligned} y &= -1 - x \\ (-3, 2) \end{aligned}$$

$$72) 3y - 6 = -3x$$
$$\begin{aligned} 9 + 3y &= 2x \\ (3, -1) \end{aligned}$$

$$74) -3y = -12 - x$$
$$\begin{aligned} -3 &= -2x - 3y \\ (-3, 3) \end{aligned}$$

$$76) -4 = y + 6x$$
$$\begin{aligned} -3 &= x - y \\ (-1, 2) \end{aligned}$$

$$78) 0 = x - y - 1$$
$$\begin{aligned} -2 &= -x \\ (2, 1) \end{aligned}$$

$$80) 0 = x - y + 1$$
$$\begin{aligned} -4 &= -y - 2x \\ (1, 2) \end{aligned}$$

$$81) \begin{aligned} 0 &= 4 + x - 2y \\ 7x &= 4y + 12 \\ (4, 4) \end{aligned}$$

$$83) \begin{aligned} 0 &= x + \frac{8}{3} + \frac{2}{3}y \\ -y &= -3 - 2x \\ (-2, -1) \end{aligned}$$

$$85) \begin{aligned} 5x &= 3y - 12 \\ 3y &= -2x - 9 \\ (-3, -1) \end{aligned}$$

$$87) \begin{aligned} y - \frac{1}{2}x &= -3 \\ 5x - 6 &= -2y \\ (2, -2) \end{aligned}$$

$$89) \begin{aligned} -2y - 2 &= -x \\ x &= -4y + 8 \\ (4, 1) \end{aligned}$$

$$91) \begin{aligned} -4 - y &= 0 \\ 0 &= 3y - 6x - 12 \\ (-4, -4) \end{aligned}$$

$$93) \begin{aligned} x &= 9 - 3y \\ 0 &= -x + y + 1 \\ (3, 2) \end{aligned}$$

$$95) \begin{aligned} 0 &= 9 - 3y - 4x \\ 4 + y &= x \\ (3, -1) \end{aligned}$$

$$97) \begin{aligned} 3y + 12 &= 7x \\ 3y - 12 + x &= 0 \\ (3, 3) \end{aligned}$$

$$99) \begin{aligned} 0 &= -5x + 2y + 4 \\ 0 &= x + 2y - 8 \\ (2, 3) \end{aligned}$$

$$101) \begin{aligned} 6 + y &= 2x \\ 0 &= -y - 2 \\ (2, -2) \end{aligned}$$

$$103) \begin{aligned} 5y - 14x &= 30 \\ 0 &= -35 + x - 5y \\ (-5, -8) \end{aligned}$$

$$105) \begin{aligned} x - 12 + 4y &= 0 \\ 8y &= -72 + 22x \\ (4, 2) \end{aligned}$$

$$107) \begin{aligned} 48 + 22x &= 12y \\ 6y + x &= -48 \\ (-6, -7) \end{aligned}$$

$$82) \begin{aligned} 0 &= -x - 12 + 3y \\ -24 - 6y &= 14x \\ (-3, 3) \end{aligned}$$

$$84) \begin{aligned} -9 + 7x &= -3y \\ 0 &= 3 + x + \frac{3}{2}y \\ (3, -4) \end{aligned}$$

$$86) \begin{aligned} 0 &= x - 3 \\ -x &= -12 - 3y \\ (3, -3) \end{aligned}$$

$$88) \begin{aligned} 7x + 4 &= -y \\ -1 + \frac{1}{2}y + \frac{1}{2}x &= 0 \\ (-1, 3) \end{aligned}$$

$$90) \begin{aligned} -2x - y &= -1 \\ 2x &= 3 + y \\ (1, -1) \end{aligned}$$

$$92) \begin{aligned} -3 + y &= -x \\ y &= -3 - 7x \\ (-1, 4) \end{aligned}$$

$$94) \begin{aligned} -9y &= -15x - 9 \\ 3x - 9y &= 27 \\ (-3, -4) \end{aligned}$$

$$96) \begin{aligned} 0 &= 18 + 9x - 6y \\ -2 - 2y &= -x \\ (-4, -3) \end{aligned}$$

$$98) \begin{aligned} 2 &= y + x \\ -8y &= 8 + 2x \\ (4, -2) \end{aligned}$$

$$100) \begin{aligned} -1 - \frac{1}{4}y + \frac{3}{8}x &= 0 \\ -2y - 3x &= -4 \\ (2, -1) \end{aligned}$$

$$102) \begin{aligned} -4y &= 12 + x \\ -4y + 20 &= 5x \\ (8, -5) \end{aligned}$$

$$104) \begin{aligned} y + 2x &= -6 \\ -84 &= -14y - 4x \\ (-7, 8) \end{aligned}$$

$$106) \begin{aligned} 3y + 3 + 9x &= 0 \\ 8 &= x + 2y \\ (-2, 5) \end{aligned}$$

$$108) \begin{aligned} 27 &= -3y + \frac{15}{7}x \\ 0 &= -84 + 24x + 21y \\ (7, -4) \end{aligned}$$

109) $-3y - 27 = -11x$
 $0 = -9 + 3y + x$
 $(3, 2)$

111) $-6 + \frac{5}{2}x = y$
 $3y - 18 + \frac{21}{2}x = 0$
 $(2, -1)$

113) $8y + 15x = -48$
 $8y - 48 + 3x = 0$
 $(-8, 9)$

115) $-8x = -18 - 2y$
 $0 = 4x + 3y - 21$
 $(3, 3)$

117) $x = 3y - 21$
 $0 = 3 - 3y - 5x$
 $(-3, 6)$

119) $-20 = 4y - 3x$
 $9 - x = y$
 $(8, 1)$

121) $3x - 9 + y = 0$
 $-8 = -7x + 2y$
 $(2, 3)$

123) $-2x = -9y - 63$
 $-9y + 11x = -18$
 $(-9, -9)$

125) $0 = -9 + y - \frac{15}{8}x$
 $-32 + 2x - 8y = 0$
 $(-8, -6)$

127) $x = -6 + 3y$
 $-\frac{1}{5}y = 1 + \frac{2}{5}x$
 $(-3, 1)$

129) $3y + 4x = 12$
 $0 = x - 9$
 $(9, -8)$

131) $8y - 3x = -16$
 $\frac{1}{7}y - \frac{3}{14}x = 1$
 $(-8, -5)$

133) $0 = -10y - 16x + 60$
 $-1 - \frac{1}{3}y = -\frac{1}{15}x$
 $(5, -2)$

110) $y - 8 = x$
 $-y = 6x + 6$
 $(-2, 6)$

112) $27 + 3y = -x$
 $-2x + 2 = -2y$
 $(-6, -7)$

114) $-21y - 42 - 6x = 0$
 $-112 + 24x + 14y = 0$
 $(7, -4)$

116) $x + 6 + y = 0$
 $8x = 14y - 70$
 $(-7, 1)$

118) $0 = -y + 9$
 $-4y + 12 - 3x = 0$
 $(-8, 9)$

120) $-63 = 7y + 3x$
 $13x = 7y - 49$
 $(-7, -6)$

122) $-12 + 5x = -6y$
 $-x = -6y - 24$
 $(6, -3)$

124) $0 = -9 + y - \frac{2}{3}x$
 $6y + 4x = 30$
 $(-3, 7)$

126) $-5x - 2y = -18$
 $-2y + 8x = 8$
 $(2, 4)$

128) $-24 + x = -4y$
 $-2y + x = -18$
 $(-4, 7)$

130) $0 = -2x - 3y + 6$
 $\frac{1}{8}x = 1 + \frac{1}{8}y$
 $(6, -2)$

132) $y - 2x = -9$
 $0 = 5 + 5y - 2x$
 $(5, 1)$

134) $30 - 5y = 2x$
 $5y + 15 + 11x = 0$
 $(-5, 8)$

135) $-3x = -8 + y$
 $0 = x - \frac{1}{2}y + \frac{3}{2}$
 $(1, 5)$

137) $2x = \frac{54}{11} - \frac{18}{11}y$
 $243 = -27y + 3x$
 $(9, -8)$

139) $14x = -81 + 9y$
 $6x - 27y - 81 = 0$
 $(-9, -5)$

141) $96 + 24y = -9x$
 $-36 - 4y + x = 0$
 $(8, -7)$

143) $10 = 7x + 5y$
 $5y = -x + 40$
 $(-5, 9)$

145) $-\frac{11}{63}x = 1 - \frac{1}{7}y$
 $-1 - \frac{1}{8}y = \frac{1}{18}x$
 $(-9, -4)$

147) $-x = -12 + 3y$
 $-54 = 3x - 6y$
 $(-6, 6)$

149) $9y + 2x + 9 = 0$
 $9y = -10x + 63$
 $(9, -3)$

151) $4 = x + 2y$
 $12 = 2y - 3x$
 $(-2, 3)$

153) $-y = -9 - 3x$
 $5 = x + y$
 $(-1, 6)$

155) $7y - 3x + 63 = 0$
 $-7y - 5x = 7$
 $(7, -6)$

157) $-7 + 7y = -6x$
 $x - 42 = 7y$
 $(7, -5)$

159) $y - 7 = 0$
 $3x - 4 = -4y$
 $(-8, 7)$

161) $5x + 27 = 3y$
 $3y + 18 = -10x$
 $(-3, 4)$

136) $-5y = -30 + 7x$
 $2x - 15 - 5y = 0$
 $(5, -1)$

138) $9 = 3y - 3x$
 $4x = -2 - y$
 $(-1, 2)$

140) $-10 = -7x + 5y$
 $10y = 60 - 2x$
 $(5, 5)$

142) $2x = 1 - y$
 $0 = y - 4 - x$
 $(-1, 3)$

144) $2y = -x + 2$
 $2y + 6 = x$
 $(4, -1)$

146) $-15 = -3y - 2x$
 $21 = -3y - 8x$
 $(-6, 9)$

148) $0 = -4y - 3x - 4$
 $0 = -7 - y$
 $(8, -7)$

150) $-12y = 84 - 22x$
 $18 + x = 6y$
 $(6, 4)$

152) $24 + 13x = 6y$
 $-x = -3y - 21$
 $(-6, -9)$

154) $0 = 7 - y - 2x$
 $-y + x = 2$
 $(3, 1)$

156) $-2x - y = 2$
 $7 = -x + y$
 $(-3, 4)$

158) $0 = x + 1 + y$
 $9x - 7 = -y$
 $(1, -2)$

160) $5 = 2x + y$
 $-5x + y + 9 = 0$
 $(2, 1)$

162) $7y + 28 - 4x = 0$
 $-7y + 56 + 16x = 0$
 $(-7, -8)$

163) $112 + 14y = 2x$
 $0 = y - 2 - \frac{11}{7}x$
 $(-7, -9)$

165) $0 = -y + 2$
 $-y = -8 + 3x$
 $(2, 2)$

167) $5y = -15 - x$
 $-y = 9 + \frac{7}{5}x$
 $(-5, -2)$

169) $-3x + 6y = -24$
 $y = 8 + 2x$
 $(-8, -8)$

171) $-5x - 3y - 21 = 0$
 $63 = x + 9y$
 $(-9, 8)$

173) $6x + 72 - 8y = 0$
 $-7x = 2y + 16$
 $(-4, 6)$

175) $0 = -1 + y - x$
 $-6 = -10x + 2y$
 $(1, 2)$

177) $0 = -6 - x + 2y$
 $12 + 4y = -x$
 $(-8, -1)$

179) $-x = -9$
 $-3y + 9 = -2x$
 $(9, 9)$

181) $-9x = 7y - 56$
 $3x = 7y + 28$
 $(7, -1)$

183) $-1 - \frac{13}{63}x + \frac{1}{7}y = 0$
 $-63 - x = 9y$
 $(-9, -6)$

185) $-5y - 35 = 14x$
 $-40 + 10y = -6x$
 $(-5, 7)$

187) $0 = 36 - 7x + 4y$
 $-20 + 4y + 7x = 0$
 $(4, -2)$

189) $7y = 8x - 28$
 $56 = 4x + 7y$
 $(7, 4)$

164) $\frac{17}{81}x + \frac{1}{9}y = -1$
 $15 = 3y + x$
 $(-9, 8)$

166) $-4y - 2x = 8$
 $-54 = 6y - 4x$
 $(6, -5)$

168) $-8 + 4y = -3x$
 $14 = 2y - x$
 $(-4, 5)$

170) $-5y = -45 + 13x$
 $-4 = y$
 $(5, -4)$

172) $1 - \frac{1}{3}y = \frac{4}{9}x$
 $-24 + 7x = 3y$
 $(3, -1)$

174) $-5x - 36 = -9y$
 $5x = 3y + 18$
 $(9, 9)$

176) $-15 + 24x - 3y = 0$
 $-y = -4 + x$
 $(1, 3)$

178) $16 + 9x = 8y$
 $64 + 8y = -x$
 $(-8, -7)$

180) $0 = -32 + 5x - 4y$
 $x = -4y - 8$
 $(4, -3)$

182) $0 = -x + 8y - 32$
 $5x + 16 = -8y$
 $(-8, 3)$

184) $0 = 3y - 21 - \frac{3}{5}x$
 $-x - y + 1 = 0$
 $(-5, 6)$

186) $96 + 16y = -6x$
 $-20 = -7x - 4y$
 $(8, -9)$

188) $1 + y + x = 0$
 $-3x + 6y - 12 = 0$
 $(-2, 1)$

190) $3y + 8x = -27$
 $x + 3y - 15 = 0$
 $(-6, 7)$

191) $2x - \frac{126}{13} + \frac{18}{13}y = 0$
 $-x + 63 = -9y$
 $(9, -6)$

193) $x - 7y - 63 = 0$
 $3y + 6x = 18$
 $(7, -8)$

195) $-9y + 21x - 81 = 0$
 $6 = y + \frac{8}{3}x$
 $(3, -2)$

197) $-y - 3 = 8x$
 $x = y - 6$
 $(-1, 5)$

199) $0 = 6 + 2x + y$
 $-147 = -21y - 3x$
 $(-7, 8)$

201) $204 + 12y - 45x = 0$
 $-12y = -60 + 21x$
 $(4, -2)$

203) $0 = y - 5$
 $0 = -7 - y + 3x$
 $(4, 5)$

205) $x + 2y - 26 = 0$
 $8 - y + \frac{3}{4}x = 0$
 $(4, 11)$

207) $0 = 11 - y - \frac{1}{4}x$
 $-\frac{31}{4}x = 51 + 3y$
 $(-12, 14)$

209) $-48 = 6y - 5x$
 $12y = -228 - x$
 $(-12, -18)$

211) $-15 = 3y$
 $-12y + 144 = -51x$
 $(-4, -5)$

213) $-2y + 32 = -6x$
 $65 = -5y - 14x$
 $(-5, 1)$

215) $-3y - 7x = -45$
 $1 - \frac{1}{2}y = -x$
 $(3, 8)$

192) $90 = 20x + 18y$
 $9y = -x - 36$
 $(9, -5)$

194) $\frac{1}{3}y = -x - \frac{5}{3}$
 $2y - 5x = 12$
 $(-2, 1)$

196) $28 + 4y = x$
 $-4y + 36 - 7x = 0$
 $(8, -5)$

198) $7y + 6x = -14$
 $7y + 63 = x$
 $(7, -8)$

200) $-27 + 3y = -10x$
 $3y = 5x - 18$
 $(3, -1)$

202) $20x = 19y + 361$
 $-18x = -361 + 19y$
 $(19, 1)$

204) $11x = 12y - 228$
 $1 - \frac{7}{12}x = y$
 $(-12, 8)$

206) $-5x - 156 = -12y$
 $2y = -12 + 4x$
 $(12, 18)$

208) $110 + 5x + 11y = 0$
 $-44 + 11y = -19x$
 $(11, -15)$

210) $16x = -11y + 88$
 $-11y - 77 = x$
 $(11, -8)$

212) $-20 + 2y - 11x = 0$
 $52 + x = -4y$
 $(-4, -12)$

214) $0 = 76 + 19y - 9x$
 $-19y - 9x + 266 = 0$
 $(19, 5)$

216) $-13x = 19y - 209$
 $-16x = -342 - 19y$
 $(19, -2)$

217) $72 + 12y = -17x$
 $-7x = -12y + 216$
 $(-12, 11)$

219) $-33 = -21x - 11y$
 $-176 = 2x + 11y$
 $(11, -18)$

221) $6x = 5y + 85$
 $-195 + 15y = -27x$
 $(10, -5)$

223) $-110 = 11y + x$
 $33y = -99 - 24x$
 $(11, -11)$

225) $40 + 5y = -13x$
 $y - 15 = 2x$
 $(-5, 5)$

227) $0 = -17x + 342 - 18y$
 $-2x - 36y + 108 = 0$
 $(18, 2)$

229) $-13 + y = -x$
 $-y = -11$
 $(2, 11)$

231) $13 + 13y = 17x$
 $-2x + 13y + 208 = 0$
 $(-13, -18)$

233) $1 - \frac{1}{7}y = \frac{3}{14}x$
 $x - 26 = 2y$
 $(10, -8)$

235) $-y = 13 + \frac{4}{7}x$
 $-91 = 9x - 7y$
 $(-14, -5)$

237) $15 = 5y + 2x$
 $-40 - 10y = -3x$
 $(10, -1)$

239) $x + 3y - 18 = 0$
 $0 = -30 - 13x - 6y$
 $(-6, 8)$

241) $255 = 17y - 3x$
 $-21x = -51 - 17y$
 $(17, 18)$

218) $-3y + 15 = -10x$
 $-x - 3y = -48$
 $(3, 15)$

220) $13y + 22x = -52$
 $-15x - 39y = -507$
 $(-13, 18)$

222) $0 = y - 4x - 12$
 $0 = 6x + 70 + 5y$
 $(-5, -8)$

224) $y + 8 - \frac{7}{13}x = 0$
 $-13y - 234 = 3x$
 $(-13, -15)$

226) $5y = -70 - 12x$
 $-18x = -5y + 80$
 $(-5, -2)$

228) $18y - 180 = -2x$
 $7x - 54 = 9y$
 $(18, 8)$

230) $2y = 36$
 $21x - 2y = 6$
 $(2, 18)$

232) $19 - 2x = -y$
 $20 - 2y = 25x$
 $(2, -15)$

234) $y = 5 + \frac{8}{7}x$
 $x - \frac{112}{3} = \frac{14}{3}y$
 $(-14, -11)$

236) $0 = -y + 5 + \frac{5}{9}x$
 $0 = 16 + y - \frac{31}{18}x$
 $(18, 15)$

238) $-18x = -80 - 20y$
 $5y = -x + 35$
 $(10, 5)$

240) $y = 16 + \frac{7}{3}x$
 $-38 - 7x - 2y = 0$
 $(-6, 2)$

242) $-x = -84 + 6y$
 $11x - 24 = -6y$
 $(-6, 15)$

243) $x = 2$

$2y = -38 + x$

 $(2, -18)$

245) $714 = 6x + 51y$

$0 = -17y - 17 + 13x$

 $(17, 12)$

247) $-3y = 21 - 6x$

$-33x = -18 + 3y$

 $(1, -5)$

249) $10x + 9y - 108 = 0$

$0 = 9 - x$

 $(9, 2)$

251) $120 + 15y = -13x$

$40 - 5y = -x$

 $(-15, 5)$

253) $-x - \frac{7}{30}y = \frac{21}{5}$

$7y = 3x + 105$

 $(-7, 12)$

255) $160 + 7x + 16y = 0$

$y + \frac{17}{8}x = 17$

 $(16, -17)$

257) $-3 - \frac{3}{10}y = -\frac{6}{35}x$

$-7y + 7 = -15x$

 $(-7, -14)$

259) $y = -19x + 11$

$-y = 10 - 2x$

 $(1, -8)$

261) $2y - 8 = -x$

$-528 = -21x + 48y$

 $(16, -4)$

263) $-60 = -2x - 10y$

$-9y = 99 + 12x$

 $(-15, 9)$

265) $y + \frac{7}{19}x = -2$

$12x = -323 + 19y$

 $(-19, 5)$

267) $120 + 8y = x$

$-56 - 8y = 7x$

 $(8, -14)$

244) $2y = 8x - 30$

$-8 = 3x + y$

 $(1, -11)$

246) $-408 = -51y - 66x$

$51y + 15x = -459$

 $(17, -14)$

248) $0 = 2y + x + 30$

$-14y + 14 = -9x$

 $(-14, -8)$

250) $-y = 16 + \frac{15}{14}x$

$-12 + 2y = x$

 $(-14, -1)$

252) $-9y = x - 90$

$27y - 39x = -108$

 $(9, 9)$

254) $14y = 266 + 2x$

$-y = 10 + 4x$

 $(-7, 18)$

256) $-9 = 4x - 3y$

$-4x + 9y = 99$

 $(9, 15)$

258) $-96 - 16y = 5x$

$-16 = -x$

 $(16, -11)$

260) $-4x = 15y + 75$

$-x + y = 14$

 $(-15, -1)$

262) $15y - 15 = -x$

$-3y = 2x + 24$

 $(-15, 2)$

264) $-8 = -4y + 5x$

$-8y = 7x - 152$

 $(8, 12)$

266) $x - 2y = -30$

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

 $(8, 19)$

268) $-x + 4y - 76 = 0$

$-1 = -\frac{1}{2}y - \frac{13}{32}x$

 $(-16, 15)$

269) $128 + 27x = 8y$
 $-36 - 4y + x = 0$
 $(-8, -11)$

270) $\frac{112}{3} + \frac{8}{3}y = x$
 $-y = -18 - \frac{35}{8}x$
 $(-8, -17)$

271) $4y = 56 + 9x$
 $5x + 8 = 8y$
 $(-8, -4)$

272) $-14 = 3x - y$
 $4x + 14 = -y$
 $(-4, 2)$

273) $-2 + \frac{1}{22}x = \frac{2}{11}y$
 $-3x + 20 = 4y$
 $(16, -7)$

274) $-144 - 8y = 15x$
 $0 = y - 12$
 $(-16, 12)$

275) $-14x + 225 + 15y = 0$
 $-240 = -17x - 15y$
 $(15, -1)$

276) $-20x = 77 + 7y$
 $-y = -10 - \frac{1}{7}x$
 $(-7, 9)$

277) $17 = -y + \frac{23}{15}x$
 $\frac{15}{2} = -x + \frac{15}{4}y$
 $(15, 6)$

278) $20 + 2y + 2x = 0$
 $210 - 21y = 81x$
 $(7, -17)$

279) $0 = x + 2y - 22$
 $105x = -768 - 48y$
 $(-16, 19)$

280) $-7y = -133 + 29x$
 $-21y = 294 - 12x$
 $(7, -10)$

281) $-3y + 2x = 3$
 $-20x + 9y = 117$
 $(-9, -7)$

282) $-x = \frac{1}{12}y - \frac{1}{4}$
 $0 = 2x + 17 - y$
 $(-1, 15)$

283) $-6x + 8 = -4y$
 $-8y + x = 104$
 $(-8, -14)$

284) $5x + 36 = 9y$
 $-27 - 9y = 2x$
 $(-9, -1)$

285) $-35 + x = 5y$
 $45y = -48x + 540$
 $(15, -4)$

286) $2y - 32 - 8x = 0$
 $0 = y + 3x - 9$
 $(-1, 12)$

287) $-90 = -45y + 3x$
 $15y + 9x = 180$
 $(15, 3)$

288) $-2x + 7y - 35 = 0$
 $0 = -84 - 14y + 15x$
 $(14, 9)$

289) $-1 + \frac{1}{7}y - \frac{1}{7}x = 0$
 $y = 18 + 12x$
 $(-1, 6)$

290) $0 = 15x + 17y - 17$
 $17y = 255 - x$
 $(-17, 16)$

291) $-3x + 238 = -17y$
 $-\frac{187}{28} = x - \frac{17}{28}y$
 $(-17, -17)$

292) $-y - 4x = -10$
 $2y = -28$
 $(6, -14)$

293) $0 = 15 + 3y + x$
 $0 = 5 - y - 2x$
 $(6, -7)$

294) $25x = -255 + 17y$
 $-2x - \frac{34}{3}y = \frac{442}{3}$
 $(-17, -10)$

295) $18 - y - x = 0$
 $-51x + 6 = 3y$
 $(-1, 19)$

296) $3y = -45 + 7x$
 $4x - 21 + 3y = 0$
 $(6, -1)$

297) $126 = -10x - 9y$
 $117 - 9y + 17x = 0$
 $(-9, -4)$

298) $10y + 23x + 140 = 0$
 $8 = 2y + x$
 $(-10, 9)$

299) $-144 = -9y + 13x$
 $-1 - \frac{2}{15}x = \frac{1}{15}y$
 $(-9, 3)$

300) $0 = 14y + 3x - 126$
 $-1 = -y + \frac{5}{14}x$
 $(14, 6)$

301) $2y - x = 6$
 $0 = -4 + 4x - y$
 $(2, 4)$

302) $0 = -4 + 4y + 3x$
 $0 = -2x + 24 + 8y$
 $(4, -2)$

303) $-10x - 6y + 24 = 0$
 $6 = x - 3y$
 $(3, -1)$

304) $-x = 3 - y$
 $-y + 8x = 4$
 $(1, 4)$

305) $2x = -3 + y$
 $6x + 3y = -3$
 $(-1, 1)$

306) $\frac{4}{3} + \frac{1}{3}y = -x$
 $-6 + 6y + 3x = 0$
 $(-2, 2)$

307) $6y - 2x = -12$
 $-27 = -9y - 12x$
 $(3, -1)$

308) $-6x + 9 = 9y$
 $6y + 14x = -24$
 $(-3, 3)$

309) $-2 + x - y = 0$
 $-3y + 6 = -15x$
 $(-1, -3)$

310) $x + \frac{4}{3} - \frac{2}{3}y = 0$
 $4 + 2y = x$
 $(-4, -4)$

311) $x + 4y = 8$
 $0 = 2x + 8$
 $(-4, 3)$

312) $y = -x - 3$
 $-y = -2 - 4x$
 $(-1, -2)$

313) $4 = x$
 $0 = 5x - 4 - 4y$
 $(4, 4)$

314) $-8 - 3x = 2y$
 $3x - 2y = -4$
 $(-2, -1)$

315) $-8 = -x - 2y$
 $12y = -36 + 15x$
 $(4, 2)$

316) $3x - \frac{9}{2} = -\frac{3}{2}y$
 $-8 + 10x - 2y = 0$
 $(1, 1)$

317) $3y - 2x = 3$
 $y = -x - 4$
 $(-3, -1)$

318) $9 - 3y - x = 0$
 $-y = -x + 1$
 $(3, 2)$

319) $4 + 7x + y = 0$
 $0 = -3y - 3x + 6$
 $(-1, 3)$

320) $-4 = y$
 $-6x = 3y + 6$
 $(1, -4)$

321) $\frac{1}{12}x = -1 - \frac{1}{3}y$
 $2y - 4 = -3x$
 $(4, -4)$

323) $3x - 6 + 3y = 0$
 $-x - 4 = -y$
 $(-1, 3)$

325) $4x = -y - 4$
 $2x = -4y + 12$
 $(-2, 4)$

327) $0 = 8 - 4y - x$
 $-3x + 8 = -4y$
 $(4, 1)$

329) $3 = x - \frac{3}{2}y$
 $-3y = -9 - 7x$
 $(-3, -4)$

331) $4 + y = -x$
 $0 = -2 + y - 5x$
 $(-1, -3)$

333) $1 - y + \frac{2}{3}x = 0$
 $-3y = x - 12$
 $(3, 3)$

335) $3y = 12 + 9x$
 $y + 1 + 2x = 0$
 $(-1, 1)$

337) $-4 - 2y = 4x$
 $x = -4 + y$
 $(-2, 2)$

339) $3 + y = -x$
 $-2 + y = -6x$
 $(1, -4)$

341) $x = 1 - y$
 $-4y + x = 16$
 $(4, -3)$

343) $-21x - 12y = 48$
 $4 + x = 0$
 $(-4, 3)$

345) $-1 - \frac{1}{4}y + \frac{1}{2}x = 0$
 $-3y + x = -3$
 $(3, 2)$

347) $36 - 21x = -12y$
 $24 + 2x = 8y$
 $(4, 4)$

322) $3y + 2x = -3$
 $7x + 3y = 12$
 $(3, -3)$

324) $0 = -2y + 6 - 5x$
 $-x + 2y = -6$
 $(2, -2)$

326) $-4 = -2x + y$
 $2y + 10x - 6 = 0$
 $(1, -2)$

328) $-4 - x = -4y$
 $2x = \frac{4}{3}y + \frac{16}{3}$
 $(4, 2)$

330) $-y + 3 - 4x = 0$
 $0 = 2x - 3 - y$
 $(1, -1)$

332) $2y - 6 = 3x$
 $-4y - 8 = -x$
 $(-4, -3)$

334) $-y = -3$
 $-2x + y + 1 = 0$
 $(2, 3)$

336) $4 + 3x = 4y$
 $-36 - 3x = 12y$
 $(-4, -2)$

338) $2y + 3x = 8$
 $-4 = x + 4y$
 $(4, -2)$

340) $4 - x = 4y$
 $-2y = -x - 8$
 $(-4, 2)$

342) $-3 + 3y = -2x$
 $-3y = 12 - 3x$
 $(3, -1)$

344) $4x = 2y + 2$
 $0 = -2 + x + y$
 $(1, 1)$

346) $-3y - 9 - 3x = 0$
 $-1 + \frac{1}{3}y - \frac{5}{3}x = 0$
 $(-1, -2)$

348) $-y - 2 = -4x$
 $-1 = y - 4x$
No solution

349) $5x - 2y = -6$
 $-y - 4 = x$
 $(-2, -2)$

351) $-x + 4 = -y$
 $3 + y = 0$
 $(1, -3)$

353) $-2x = -4 + y$
 $0 = -x + \frac{2}{3} + \frac{1}{6}y$
 $(1, 2)$

355) $12 + 6y = -3x$
 $-1 = -\frac{7}{8}x - \frac{1}{4}y$
 $(2, -3)$

357) $-5x - 2y = 2$
 $2y - 6 + x = 0$
 $(-2, 4)$

359) $y = -1 - x$
 $-15x + 9 = 3y$
 $(1, -2)$

361) $3y - x = -6$
 $2x - y = -3$
 $(-3, -3)$

363) $y = -x - 4$
 $0 = 2x + 3 - 3y$
 $(-3, -1)$

365) $-3y + 12 = x$
 $x - \frac{6}{5} = \frac{3}{5}y$
 $(3, 3)$

367) $3x - 3y = -9$
 $x = -y - 1$
 $(-2, 1)$

369) $-1 + \frac{5}{2}x = y$
 $x + 6 = 2y$
 $(2, 4)$

371) $x = 2 - y$
 $8 + 2y = 2x$
 $(3, -1)$

373) $-x = 9 - 3y$
 $-x - 1 = y$
 $(-3, 2)$

375) $y + 2 = x$
 $-y = x + 4$
 $(-1, -3)$

350) $9 = -x - 3y$
 $5x + 3y = 3$
 $(3, -4)$

352) $-y + x = -4$
 $x = -\frac{1}{4}y - \frac{1}{4}$
 $(-1, 3)$

354) $-y - 4 = -x$
 $-6 + 3y = -15x$
 $(1, -3)$

356) $-3 = y + x$
 $4y = 3x + 16$
 $(-4, 1)$

358) $16 - 3x = 4y$
 $0 = -3x - 4y - 8$
No solution

360) $0 = y - 1 - 2x$
 $-2x - y = 3$
 $(-1, -1)$

362) $2y = x - 6$
 $0 = -2 - x$
 $(-2, -4)$

364) $x - y = 1$
 $-9 = -x - 3y$
 $(3, 2)$

366) $-\frac{4}{5}y = -x - \frac{8}{5}$
 $-x - 4y = 16$
 $(-4, -3)$

368) $8 + 2x = -8y$
 $4y = -x + 16$
No solution

370) $0 = -x - 4 + 2y$
 $2y + 6 - x = 0$
No solution

372) $y + 3 + x = 0$
 $-5x - y + 1 = 0$
 $(1, -4)$

374) $-y = 2x - 4$
 $2x + 8y = -24$
 $(4, -4)$

376) $-3 - 3y = -3x$
 $2y + 3x = 8$
 $(2, 1)$

$$377) -x = y + 1$$

$$-1 - \frac{1}{16}x = -\frac{1}{4}y$$

(-4, 3)

$$379) 2x = -y + 2$$

$$-2x = 6y + 18$$

(3, -4)

$$381) 3 = -2x + y$$

$$2y = -8 - 3x$$

(-2, -1)

$$383) -y + 5x = 3$$

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

(1, 2)

$$385) -6 = 2y - 2x$$

$$7x = -3 + y$$

(-1, -4)

$$387) -8 = 2x - 2y$$

$$4x - 2 = -2y$$

(-1, 3)

$$389) 3x - 6 - 3y = 0$$

$$4 + 4x = y$$

(-2, -4)

$$391) x - 4y + 8 = 0$$

$$0 = 2y + 2 + x$$

(-4, 1)

$$393) -15x + 12y = 24$$

$$0 = -5x - 16 + 4y$$

No solution

$$395) 6 = -x + 3y$$

$$3 - 4x = -3y$$

(3, 3)

$$397) -x - 3 = -y$$

$$-x - 4y = 8$$

(-4, -1)

$$399) -16 = -4y + 7x$$

$$0 = x - 2y - 2$$

(-4, -3)

$$401) -4x = 9y - 63$$

$$-9y = -11x + 72$$

(9, 3)

$$403) -y + 7x = -1$$

$$x = -7 - y$$

(-1, -6)

$$378) 3x + 1 = y$$

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

No solution

$$380) 3 - 2x - y = 0$$

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

(1, 1)

$$382) 12x - 2y = -6$$

$$-3y = -9 - 18x$$

Infinite number of solutions

$$384) 4 = -2y + 3x$$

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

(4, 4)

$$386) 0 = 5x - 4 + 2y$$

$$2y = -8 + x$$

(2, -3)

$$388) 3x - 1 = -y$$

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

No solution

$$390) 9 - 3y = 3x$$

$$-y - 8x = 4$$

(-1, 4)

$$392) 8 + 3x = -2y$$

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

(-2, -1)

$$394) -4 - \frac{8}{3}x = -y$$

$$0 = -2x + 3y + 6$$

(-3, -4)

$$396) 0 = -3y + 12 - \frac{3}{2}x$$

$$0 = 4 - 3x + 4y$$

(4, 2)

$$398) 0 = -8x + 2y + 8$$

$$2 = -x + y$$

(2, 4)

$$400) -8 = 3x - 2y$$

$$-8 = 2y + x$$

(-4, -2)

$$402) -3y = 3 - 7x$$

$$0 = 2x - 24 + 3y$$

(3, 6)

$$404) y + 8 = -\frac{1}{5}x$$

$$0 = -15 - 6x - 5y$$

(5, -9)

$$405) -3y - x = 15$$

$$8 - y = -\frac{11}{6}x$$

$$(-6, -3)$$

$$407) 0 = -9x - 40 - 5y$$
$$-15y + 21x = -120$$

$$(-5, 1)$$

$$409) 4y - 32 = -17x$$
$$32 + 4y = -x$$

$$(4, -9)$$

$$411) -y - \frac{1}{3}x = 1$$
$$7x + 36 = -6y$$

$$(-6, 1)$$

$$413) 7x - 8y = 24$$
$$24 + x = 8y$$

$$(8, 4)$$

$$415) y + 9 = -2x$$
$$-26x - 32 + 4y = 0$$

$$(-2, -5)$$

$$417) 3y + \frac{3}{2}x = 27$$
$$18 + 2y - 17x = 0$$

$$(2, 8)$$

$$419) 3x = -42 + 6y$$
$$3y + 12 = 18x$$

$$(2, 8)$$

$$421) 6 = 2y - 7x$$
$$2y = x - 6$$

$$(-2, -4)$$

$$423) 4 - 4y = -x$$
$$x = -2y - 10$$

$$(-8, -1)$$

$$425) -7y - 28 + 10x = 0$$
$$21y - 168 + 6x = 0$$

$$(7, 6)$$

$$427) 7 + \frac{11}{3}x = y$$
$$x = 3y + 9$$

$$(-3, -4)$$

$$429) -18 = -2y$$
$$y - 17x + 8 = 0$$

$$(1, 9)$$

$$406) 0 = -18 - 15x + 9y$$

$$3 = x$$

$$(3, 7)$$

$$408) -5x + 24 = -4y$$
$$0 = -2y + 16 - x$$

$$(8, 4)$$

$$410) 3y = 6x - 9$$
$$0 = -y - 2x - 7$$

$$(-1, -5)$$

$$412) -7y = 7 - x$$
$$3x + 7y = -35$$

$$(-7, -2)$$

$$414) 4 + 4y = -7x$$
$$0 = 4 - x$$

$$(4, -8)$$

$$416) -9x - 24 = -24y$$
$$0 = 2y + 12 + x$$

$$(-8, -2)$$

$$418) 2 = -x - 2y$$
$$\frac{5}{6}x = y - 7$$

$$(-6, 2)$$

$$420) x = -21 - 3y$$
$$9y + 27 = -15x$$

$$(3, -8)$$

$$422) 3x - \frac{21}{4}y + \frac{21}{4} = 0$$
$$-\frac{4}{63}x = -1 + \frac{1}{9}y$$

$$(7, 5)$$

$$424) -14 = 4x + 7y$$
$$-49 = -7y + 5x$$

$$(-7, 2)$$

$$426) 0 = -2x + 6$$
$$-y = x + 4$$

$$(3, -7)$$

$$428) 3x = -21y - 168$$
$$-6x - 21 = 7y$$

$$(7, -9)$$

$$430) 4x = -7 - 7y$$
$$-14y = -70 - 4x$$

$$(-7, 3)$$

$$\begin{aligned}431) \quad -11x &= -30 - 6y \\-18 &= -2y - x \\(6, 6)\end{aligned}$$

$$\begin{aligned}433) \quad -4y &= -24 - 9x \\0 &= -3x - 24 - 4y \\(-4, -3)\end{aligned}$$

$$\begin{aligned}435) \quad 0 &= -2 - x - 2y \\18 + 3x + 2y &= 0 \\(-8, 3)\end{aligned}$$

$$\begin{aligned}437) \quad -y &= 6 \\y &= 2 - 8x \\(1, -6)\end{aligned}$$

$$\begin{aligned}439) \quad -y &= x + 6 \\-x - 4y &= 12 \\(-4, -2)\end{aligned}$$

$$\begin{aligned}441) \quad -6 + x &= 3y \\-81 + 8x &= -9y \\(9, 1)\end{aligned}$$

$$\begin{aligned}443) \quad 4x - 4 &= y \\y &= x - 7 \\(-1, -8)\end{aligned}$$

$$\begin{aligned}445) \quad -4x - 5y &= 30 \\-2 - y &= 0 \\(-5, -2)\end{aligned}$$

$$\begin{aligned}447) \quad -x + 3y &= 24 \\-9y &= 72 + 13x \\(-9, 5)\end{aligned}$$

$$\begin{aligned}449) \quad 2x + 2y &= -18 \\-3y + 15 &= -39x \\(-1, -8)\end{aligned}$$

$$\begin{aligned}451) \quad -7x &= 30 - 5y \\-25 - 4x &= 5y \\(-5, -1)\end{aligned}$$

$$\begin{aligned}453) \quad 8y - 11x &= -72 \\x &= -2y + 12 \\(8, 2)\end{aligned}$$

$$\begin{aligned}455) \quad 9y &= -45 - x \\24 + 4x - 3y &= 0 \\(-9, -4)\end{aligned}$$

$$\begin{aligned}432) \quad 9 &= y \\0 &= y - 8 - x \\(1, 9)\end{aligned}$$

$$\begin{aligned}434) \quad 2y &= -10 - x \\2y - 18 &= -15x \\(2, -6)\end{aligned}$$

$$\begin{aligned}436) \quad 27 - x - 3y &= 0 \\13x &= 6y + 36 \\(6, 7)\end{aligned}$$

$$\begin{aligned}438) \quad 0 &= -y - 2 + \frac{7}{4}x \\x - 4y &= 32 \\(-4, -9)\end{aligned}$$

$$\begin{aligned}440) \quad -30 - 5y &= -13x \\5y - 3x &= 20 \\(5, 7)\end{aligned}$$

$$\begin{aligned}442) \quad -4y &= -8 + x \\x &= -y - 4 \\(-8, 4)\end{aligned}$$

$$\begin{aligned}444) \quad 9y &= -42x + 45 \\-1 - \frac{1}{8}y &= \frac{1}{24}x \\(3, -9)\end{aligned}$$

$$\begin{aligned}446) \quad 9y &= -81 + 10x \\x &= 6 + 3y \\(9, 1)\end{aligned}$$

$$\begin{aligned}448) \quad -8 - 2x - 2y &= 0 \\0 &= x - \frac{8}{3} - \frac{1}{3}y \\(1, -5)\end{aligned}$$

$$\begin{aligned}450) \quad 0 &= -7x + 12 + 2y \\\frac{3}{5}y - \frac{9}{20}x &= 3 \\(4, 8)\end{aligned}$$

$$\begin{aligned}452) \quad 2y - x &= -2 \\\frac{1}{9}y &= -1 - \frac{1}{18}x \\(-8, -5)\end{aligned}$$

$$\begin{aligned}454) \quad 3y &= 24 + x \\6x + 9 &= -9y \\(-9, 5)\end{aligned}$$

$$\begin{aligned}456) \quad x + 7 &= -y \\0 &= 1 + y \\(-6, -1)\end{aligned}$$

457) $0 = -9 - x - y$
 $-\frac{13}{4}x = 3 - \frac{1}{2}y$
 $(-2, -7)$

459) $-y + 2x = -1$
 $8y = 64 + 2x$
 $(4, 9)$

461) $-\frac{8}{9}x + \frac{1}{9}y = 1$
 $-2y - 12 = -x$
 $(-2, -7)$

463) $-6x - 7y = -63$
 $0 = y - 3$
 $(7, 3)$

465) $-3x = -3y + 15$
 $x - \frac{1}{10}y - \frac{2}{5} = 0$
 $(1, 6)$

467) $12x - 9 - 3y = 0$
 $24 = 3y - x$
 $(3, 9)$

469) $-10x = 6y - 48$
 $x = -54 - 9y$
 $(9, -7)$

471) $24 = 2x + 3y$
 $6 - 3y = 2x$
No solution

473) $3y + 4x + 27 = 0$
 $0 = 9y - 42x - 81$
 $(-3, -5)$

475) $-\frac{1}{12}x + \frac{1}{3}y = 1$
 $24y + 96 = -15x$
 $(-8, 1)$

477) $-2x + 8 = -y$
 $30 = x + 6y$
 $(6, 4)$

479) $-2y + 10 = -5x$
 $x + 4y + 24 = 0$
 $(-4, -5)$

481) $-18 = 2y - x$
 $y = -7x + 6$
 $(2, -8)$

458) $8y + 6x = 72$
 $-8y + 9x = 48$
 $(8, 3)$

460) $-27 = -3y - x$
 $-x - 3y = 3$
No solution

462) $-y = 1 - 2x$
 $18 = -2y - 12x$
 $(-1, -3)$

464) $-y - 5 = x$
 $3y - 21 = -39x$
 $(1, -6)$

466) $-y + 4x + 6 = 0$
 $0 = -2x + 3y + 12$
 $(-3, -6)$

468) $16 = -3x + \frac{8}{3}y$
 $0 = -4y - 20 - x$
 $(-8, -3)$

470) $-x - \frac{21}{2} - \frac{3}{2}y = 0$
 $3 - 10x = 3y$
 $(3, -9)$

472) $6 = y - x$
 $12x = y + 5$
 $(1, 7)$

474) $2x = -18$
 $-9y - 27 - x = 0$
 $(-9, -2)$

476) $2x + 6 = y$
 $3x - 27 = -3y$
 $(1, 8)$

478) $-7x - 9y = -45$
 $\frac{7}{9}x = 3 - y$
No solution

480) $48 = 16y - 2x$
 $0 = -24 - 8y + x$
No solution

482) $-5x - 2y = 8$
 $-y = 8 + \frac{1}{2}x$
 $(2, -9)$

483) $-35 + 12x = 5y$
 $5y = 2x + 15$
 $(5, 5)$

485) $-15 = x - 3y$
 $12 - 4x = -3y$
 $(9, 8)$

487) $-8x = y - 1$
 $y - 8 = -x$
 $(-1, 9)$

489) $7x - 5 - 5y = 0$
 $25 - 5y = -x$
 $(5, 6)$

491) $4 - 2y = 18x$
 $-9x + 2 = y$
Infinite number of solutions

493) $-2x = 9y - 9$
 $-11x - 72 - 9y = 0$
 $(-9, 3)$

495) $-y - 16x - 7 = 0$
 $-8 + y + x = 0$
 $(-1, 9)$

497) $-108 = 12y - 34x$
 $4 = y - \frac{2}{3}x$
 $(6, 8)$

499) $2x - 6 = 6y$
 $0 = -2x + \frac{3}{2}y - \frac{15}{2}$
 $(-6, -3)$

501) $\frac{1}{14}x = -1 + \frac{1}{14}y$
 $4 + 2y = 18x$
 $(2, 16)$

503) $119 + 7y = -2x$
 $147 = -21y + 9x$
 $(-14, -13)$

505) $-6 = -4x - 3y$
 $0 = -6x + 324 + 27y$
 $(9, -10)$

507) $4x + 105 = -7y$
 $6 - \frac{1}{14}x = -y$
 $(-14, -7)$

484) $-4 - 2y + x = 0$
 $3x = -8 + y$
 $(-4, -4)$

486) $2x + 24 = 3y$
 $7 + x + y = 0$
 $(-9, 2)$

488) $-x = y + 7$
 $7x = -1 - y$
 $(1, -8)$

490) $0 = 3x + \frac{27}{5}y - \frac{108}{5}$
 $0 = 9 + y - \frac{8}{9}x$
 $(9, -1)$

492) $3x = 5 + 5y$
 $0 = -3x + 5y - 25$
No solution

494) $0 = 4y - 7x + 4$
 $-4y = -x - 20$
 $(4, 6)$

496) $x = -14 - 2y$
 $-3x + 30 = -6y$
 $(-2, -6)$

498) $-\frac{9}{5}x = y + 1$
 $0 = 35 - 5y - x$
 $(-5, 8)$

500) $-27 - 27y = -12x$
 $-9y - 5x = -72$
 $(9, 3)$

502) $-4 = -21x - y$
 $-2y = -24 + 42x$
No solution

504) $-24 + 2y + x = 0$
 $0 = x + \frac{14}{25}y + \frac{84}{25}$
 $(-14, 19)$

506) $-\frac{342}{11} - \frac{19}{11}y = -x$
 $-19y - x = 114$
 $(19, -7)$

508) $-8x + 18y = -144$
 $-1 + \frac{1}{3}x = -\frac{1}{2}y$
 $(9, -4)$

509) $-6y - 108 = -14x$

$$-y = -8 + \frac{5}{9}x$$

(9, 3)

511) $7y + 22x + 63 = 0$

$$-x + \frac{77}{2} - \frac{7}{2}y = 0$$

(-7, 13)

513) $-30x + 11 = -y$

$$-y - 11 + 30x = 0$$

Infinite number of solutions

515) $-323 = -3x - 17y$

$$13x - 17y = -51$$

(17, 16)

517) $-2 - y = -\frac{8}{15}x$

$$-29x + 15y = 285$$

(-15, -10)

519) $3y + 26x = -54$

$$-13 - \frac{5}{3}x = -y$$

(-3, 8)

521) $0 = -165 - 15y - 8x$

$$210 = 15y - 17x$$

(-15, -3)

523) $1 + \frac{1}{5}y = \frac{9}{20}x$

$$-x + 4y - 44 = 0$$

(8, 13)

525) $11x = 136 - 8y$

$$1 - \frac{3}{8}x = -\frac{1}{3}y$$

(8, 6)

527) $-16y + 224 - 27x = 0$

$$3x = -8y - 56$$

(16, -13)

529) $y + 7 = 0$

$$0 = 128 - 16y + 15x$$

(-16, -7)

531) $-x + 6y + 102 = 0$

$$24 + 4x = -3y$$

(6, -16)

533) $8y = -144 + 21x$

$$8y = 16 + x$$

(8, 3)

510) $-14 = -4x - 7y$

$$7y = -16x - 70$$

(-7, 6)

512) $-\frac{10}{323}x = -1 + \frac{1}{19}y$

$$9 - y = 0$$

(17, 9)

514) $x + 12 = -y$

$$3y = -42 + 3x$$

(1, -13)

516) $27x + 16y = 160$

$$16y + 160 = -7x$$

(16, -17)

518) $-x + y + 8 = 0$

$$-7 + y = -14x$$

(1, -7)

520) $210 = -17x - 15y$

$$-5y = -45 - 2x$$

(-15, 3)

522) $14y - 10x - 210 = 0$

$$105 + 25x = -7y$$

(-7, 10)

524) $x = -8y + 120$

$$8y + 17x = -8$$

(-8, 16)

526) $-120 - 8y = -17x$

$$-x = -16y + 288$$

(16, 19)

528) $-19y + 3x - 361 = 0$

$$-x = \frac{19}{33}y - \frac{323}{33}$$

(19, -16)

530) $0 = -30 + x - 6y$

$$y = 9 - x$$

(12, -3)

532) $-16y = -9x + 304$

$$0 = 1 - \frac{1}{15}y + \frac{3}{80}x$$

No solution

534) $-y - x = 10$

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

(-16, 6)

536) $y = 9 + x$

$$x + 9 - y = 0$$

Infinite number of solutions

538) $0 = 270 - 15y - 34x$

$$15y = -225 - x$$

(15, -16)

540) $-30y - 330 = -2x$

$$-585 = -69x - 45y$$

(15, -10)

542) $16x = -15y + 225$

$$16x + 15y = 150$$

No solution

544) $2y = 14$

$$1 = 6x + y$$

(-1, 7)

546) $0 = 1 + \frac{1}{6}y$

$$-2y - 34 = 22x$$

(-1, -6)

548) $-\frac{85}{11} = -x - \frac{17}{11}y$

$$-x - 17 = 0$$

(-17, 16)

550) $70 + 9x = -7y$

$$7y = -126 - x$$

(7, -19)

552) $3x - 57 = 3y$

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

Infinite number of solutions

554) $-2x = 4$

$$2y + x = 6$$

(-2, 4)

556) $0 = -4x + 14y - 224$

$$10 + \frac{24}{7}x = -y$$

(-7, 14)

535) $7y = 77 - x$

$$6x - 112 = -7y$$

(7, 10)

537) $-9y = -162 - 31x$

$$-7x = -54 - 9y$$

(-9, -13)

539) $-27x = 64 - 8y$

$$4y - 3x = -52$$

(-8, -19)

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

$$1 = \frac{1}{13}y$$

(-8, 13)

543) $-18 + \frac{7}{5}x = -y$

$$15y = 7x - 150$$

(15, -3)

545) $x + \frac{16}{7}y + \frac{64}{7} = 0$

$$16y - 13x = 256$$

(-16, 3)

547) $-\frac{1}{7}y - \frac{3}{119}x = -1$

$$17y - 289 = 7x$$

(-17, 10)

549) $x = -\frac{77}{2} + \frac{7}{2}y$

$$-7y = 14 - 15x$$

(7, 13)

551) $0 = 14x - 18 - 9y$

$$-3y = 39 - x$$

(-9, -16)

553) $0 = -9y - 63 + 2x$

$$126 - 9y = -23x$$

(-9, -9)

555) $1 = \frac{1}{12}y + \frac{3}{28}x$

$$6 = -y$$

(14, -6)

557) $0 = -5x - 72 - 9y$

$$x = \frac{9}{11}y - \frac{72}{11}$$

(-9, -3)

$$558) -x - \frac{1}{6}y = \frac{1}{3}$$

$$2 + y = -6x$$

Infinite number of solutions

$$560) 9x = 224 - 14y$$

$$16 = -y + \frac{23}{14}x$$

$$(14, 7)$$

$$562) 0 = -180 - 23x + 18y$$

$$x = 216 + 18y$$

$$(-18, -13)$$

$$564) -33 + x - 3y = 0$$

$$-23x + 84 = 6y$$

$$(6, -9)$$

$$566) -21x = 5y - 90$$

$$\frac{21}{5}x = -y + 18$$

Infinite number of solutions

$$568) 0 = -96 + x - 6y$$

$$-36 = 18y - 17x$$

$$(-18, -19)$$

$$570) 12x = -5y - 85$$

$$-10y - 3x = -40$$

$$(-10, 7)$$

$$572) 0 = -29x + 13y + 247$$

$$-1 + \frac{1}{18}y = -\frac{4}{117}x$$

$$(13, 10)$$

$$574) 22x - 180 = 36y$$

$$-33x = -270 - 54y$$

Infinite number of solutions

$$576) -3y + 34x = -45$$

$$x + \frac{39}{34}y = \frac{3}{34}y$$

No solution

$$578) -45 - x - 3y = 0$$

$$-8x = 63 - 9y$$

$$(-18, -9)$$

$$580) 0 = 160 + 10y - 46x$$

$$-160 + 46x = 10y$$

Infinite number of solutions

$$582) 0 = -5y + 7x - 30$$

$$0 = -1 + \frac{1}{9}y + \frac{8}{45}x$$

$$(5, 1)$$

$$559) -x = \frac{306}{31} + \frac{17}{31}y$$

$$-306 - 17y - 31x = 0$$

Infinite number of solutions

$$561) -1 + 8x + y = 0$$

$$17 - y = 0$$

$$(-2, 17)$$

$$563) 14x = -3y + 36$$

$$0 = -6y - 5x - 66$$

$$(6, -16)$$

$$565) 10 + 4x = 5y$$

$$y + x = -16$$

$$(-10, -6)$$

$$567) 6x + 40 = -20y$$

$$10y - 80 = 7x$$

$$(-10, 1)$$

$$569) 5x = -13y + 117$$

$$-1 + \frac{2}{13}x = \frac{1}{4}y$$

$$(13, 4)$$

$$571) -12x = -9y + 162$$

$$3y = -28x - 42$$

$$(-3, 14)$$

$$573) -x + 13y - 208 = 0$$

$$143 - 28x = -13y$$

$$(13, 17)$$

$$575) -36 - 3y = 0$$

$$0 = -3y + 31x + 57$$

$$(-3, -12)$$

$$577) -4 = -2x - y$$

$$10y = -50 - 2x$$

$$(5, -6)$$

$$579) -19y + 17x = -266$$

$$-28x - 646 = 38y$$

$$(-19, -3)$$

$$581) 8x + 132 = 11y$$

$$22y = -66 - 14x$$

$$(-11, 4)$$

$$583) 6y = -108 + 16x$$

$$-27 = 3y - 8x$$

No solution

$$584) -11y = 15x + 44$$
$$y + 4 + \frac{15}{11}x = 0$$

Infinite number of solutions

$$586) -39 - 28x + 3y = 0$$
$$0 = -18 - x - y$$
$$(-3, -15)$$

$$588) -\frac{36}{7} + \frac{4}{7}y = -x$$
$$21x = 36y + 684$$
$$(12, -12)$$

$$590) 4y - 8 = -7x$$
$$0 = x + 64 + 4y$$
$$(12, -19)$$

$$592) 7x = 36 + 4y$$
$$3x = 12$$
$$(4, -2)$$

$$594) 0 = 12y + 19x + 144$$
$$64 = -3x + 4y$$
$$(-12, 7)$$

$$596) 0 = -x - 68 + 4y$$
$$4y - x = -32$$

No solution

$$598) \frac{5}{9}x - \frac{1}{3}y = 1$$
$$6y = -x + 114$$
$$(12, 17)$$

$$600) 0 = -11y - 209 + 4x$$
$$11y + 4x = -121$$
$$(11, -15)$$

$$585) x + \frac{11}{24}y + \frac{77}{24} = 0$$
$$-198 = -11y - 24x$$

No solution

$$587) 5x + 2y = -38$$
$$4y - 17x - 32 = 0$$
$$(-4, -9)$$

$$589) -19y + 2x = 76$$
$$0 = 2x - 76 - 19y$$

Infinite number of solutions

$$591) 190 + 19y = -11x$$
$$x + 38 = 19y$$
$$(-19, 1)$$

$$593) 8 - x = y$$
$$-2y + 7x = 20$$
$$(4, 4)$$

$$595) -y = -3x + 1$$
$$-3x - 4 = -y$$

No solution

$$597) 42 = 6y - 13x$$
$$-x + \frac{6}{13}y = \frac{42}{13}$$

Infinite number of solutions

$$599) 5x = -68 - 4y$$
$$\frac{17}{20}x = -1 + \frac{1}{5}y$$
$$(-4, -12)$$