

Multi-step equations - fractions**Solve each equation.**

1) $-1\frac{5}{6}b + 3\frac{5}{6}b = \frac{1}{6} + \frac{11}{6}b$

3) $1\frac{29}{45} + \frac{2}{5}x = -1\frac{1}{2}x + 1\frac{1}{3} + 2\frac{5}{6}x$

5) $\frac{7}{2}x + 1\frac{5}{6} = -\frac{15}{4} - \frac{7}{6}x + 1 + 3x$

7) $-\frac{367}{40} + \frac{3}{4}a + 2a = -3\frac{1}{2}a + \frac{1}{5}$

9) $\frac{19}{6}x - \frac{1}{2} = \frac{13}{18} + x - 1\frac{2}{3} - 1$

11) $-\frac{3}{4}n + \frac{3}{2} + 2n = -\frac{7}{2} - 3\frac{3}{4}n$

13) $2\frac{1}{3}p + 10\frac{2}{3} = \frac{1}{3}p + 3\frac{1}{3} + 2\frac{1}{3}$

15) $2\frac{1}{6}n + \frac{245}{24} = -\frac{7}{4}n + n$

17) $-6\frac{17}{48} - \frac{5}{4}r + 3\frac{1}{2} + 1\frac{5}{6} = -r - 1\frac{1}{3}$

19) $-1\frac{2}{3}x - \frac{4}{5} + 1\frac{3}{4} = -3\frac{7}{12} + \frac{3}{5}x$

21) $-1\frac{1}{4}v - \frac{31}{6} = \frac{5}{3}v - \frac{1}{2}$

23) $1\frac{1}{3}x + 2\frac{1}{2}x - 5\frac{5}{6} = -3\frac{2}{3}x + \frac{5}{6} + 2\frac{1}{3}$

25) $\frac{116}{15} - 3\frac{2}{5}p = p + 4\frac{4}{5}$

27) $x + \frac{1}{4}x = -\frac{403}{60} + 3\frac{5}{6}x$

29) $4\frac{3}{5}n - \frac{2}{3} = -6\frac{17}{20} + 2\frac{5}{6}n$

31) $-\frac{3}{5}r + \frac{3}{5} - 3\frac{3}{4} = -2r - \frac{35}{12}$

33) $-3b - 1\frac{1}{2} = -12\frac{1}{3} + 1\frac{1}{3}b$

35) $3\frac{1}{5}v - 1\frac{4}{5} = \frac{14}{5}v + \frac{1}{5} + \frac{2}{3}$

37) $6\frac{13}{30} - \frac{3}{4}k = -3\frac{5}{6}k - 2\frac{1}{5}$

2) $\frac{113}{20} - 1\frac{1}{4}v = v + \frac{8}{5}$

4) $-\frac{7}{3}n + 1\frac{1}{6}n - 2\frac{7}{18} = \frac{7}{4}n + 1\frac{1}{2}$

6) $\frac{4}{5}n + 6 = -n - 5\frac{2}{5}$

8) $6\frac{9}{10} + \frac{1}{4}k = 1\frac{2}{5}k - \frac{1}{4} + \frac{8}{5}k$

10) $2\frac{5}{6}x - 1\frac{29}{36} = \frac{11}{3}x + 1\frac{1}{4}$

12) $-8\frac{23}{48} - 3\frac{2}{3}m = 1\frac{3}{4}m + 1$

14) $x + \frac{11}{4} - 3x - 1\frac{1}{6} = -1\frac{1}{2}x + 1 + \frac{1}{3}$

16) $\frac{2}{5}m - 2\frac{7}{30} = -2\frac{1}{6}m + \frac{1}{3}m$

18) $1\frac{8}{9} - \frac{1}{2}n = \frac{1}{6}n + 1$

20) $b + \frac{2}{3} - \frac{3}{5}b + \frac{13}{30} = -\frac{1}{5}b + 5b$

22) $-\frac{3}{2}x - 1\frac{1}{4} = -2\frac{2}{5}x + 1\frac{9}{10}$

24) $a - 1\frac{1}{6} - 2\frac{5}{6} = -3\frac{5}{6} + \frac{2}{3}a$

26) $\frac{7}{2}k + 1\frac{5}{6} = -7\frac{23}{30} - \frac{23}{6}k - \frac{2}{3}k$

28) $1\frac{3}{4}m + \frac{2}{3} = \frac{31}{24} + \frac{1}{2}m$

30) $x + \frac{1}{4} = 12\frac{7}{18} - 3\frac{3}{4}x + 2\frac{5}{6}x$

32) $-\frac{1}{12} + \frac{3}{2}n = n + 1\frac{3}{4}$

34) $-4 + 3\frac{1}{3}x = 1\frac{1}{3}x + 4x$

36) $1\frac{1}{5} + \frac{4}{5}n = 1\frac{2}{5}n + \frac{2}{5}$

38) $11\frac{31}{48} + \frac{4}{3}a = \frac{2}{3}a + \frac{17}{4}a$

$$39) -x + \frac{5}{3} = \frac{14}{15} - 1\frac{2}{5}x$$

$$40) -\frac{17}{18} + 3\frac{2}{3}x - \frac{19}{6} + 1\frac{1}{2} = -\frac{2}{3}x + 1$$

$$41) -2\frac{11}{18} + 1\frac{1}{3}n = \frac{2}{5}n + \frac{1}{2}$$

$$42) 1\frac{1}{2}m - 2\frac{3}{4}m = -\frac{19}{24} + \frac{1}{3}m$$

$$43) 10\frac{53}{80} - 3\frac{1}{4}p = \frac{5}{2}p + \frac{3}{5}$$

$$44) -\frac{1}{180} - \frac{1}{4}x = -\frac{2}{3}x + 1\frac{4}{5}$$

$$45) -\frac{9}{2} - 1\frac{1}{6}n = n + \frac{1}{2} + \frac{17}{6}n$$

$$46) 3 + 3\frac{1}{3}m = 6m - \frac{11}{3}$$

$$47) 1\frac{11}{30} - 1\frac{1}{3}r + 1\frac{1}{2}r = 1\frac{1}{2}r + 1\frac{2}{5}r$$

$$48) 6\frac{1}{2} + 1\frac{1}{6}x = 1\frac{5}{6}x + 3\frac{1}{6}$$

$$49) 3v + 1\frac{1}{4} = 1\frac{33}{100} + 3\frac{1}{5}v$$

$$50) 1\frac{17}{20} - \frac{1}{2}x = x - 1\frac{3}{4} + 3\frac{3}{5}$$

$$51) -7\frac{1}{3} + \frac{1}{3}b = -\frac{18}{5}b - 2 + \frac{9}{5}b$$

$$52) \frac{5}{6}n + 3n = -\frac{20}{3} + 1\frac{1}{3}n$$

$$53) \frac{1}{3}a - 1 = 1\frac{5}{6}a + \frac{1}{2}a$$

$$54) 2x - 3\frac{2}{3} = 1\frac{1}{3}x - 4\frac{3}{5}$$

$$55) 2k - \frac{17}{5} = \frac{8}{5}k - 3\frac{2}{3}$$

$$56) -\frac{5}{6}p + \frac{7}{6} = 1 + 2p + 1\frac{1}{2} - \frac{3}{2}p$$

$$57) \frac{9}{2} - 1\frac{2}{3}x = -3\frac{1}{2}x - 1\frac{1}{6}x$$

$$58) \frac{18}{25} - \frac{1}{5}m = -1\frac{2}{5}m + \frac{3}{4}m$$

$$59) -\frac{4}{3}n - 6 = \frac{19}{6}n - 3\frac{3}{4}$$

$$60) 3\frac{1}{3}r + \frac{64}{9} = 1\frac{1}{2}r + 1$$

$$61) x + 1\frac{3}{4} + 2\frac{1}{4}x = 4\frac{7}{12} + x + 1\frac{1}{6} + 2$$

$$62) 9\frac{29}{36} + 3\frac{4}{5}b + b = -\frac{1}{3}b + \frac{5}{4}$$

$$63) -1\frac{1}{5}n + 1 - \frac{3}{4} = 1\frac{1}{5}n + \frac{21}{20}$$

$$64) -\frac{11}{6}v - 2\frac{2}{3}v = -12\frac{17}{30} + \frac{1}{3}v$$

$$65) 4x - 2\frac{1}{2} = -11\frac{1}{4} - x$$

$$66) -3\frac{1}{4}n - 8\frac{31}{48} = 2\frac{5}{6}n + 2$$

$$67) \frac{5}{6}x - \frac{5}{6}x = 5\frac{3}{4} - 1\frac{1}{2}x$$

$$68) 3\frac{4}{5}a + \frac{1}{4} = 2\frac{7}{10} - \frac{1}{3}a + 2\frac{1}{2}a$$

$$69) -x + \frac{1}{2} = 1\frac{1}{4} - 4x$$

$$70) \frac{5}{6}k - \frac{13}{4} = -4\frac{7}{12} + 2\frac{1}{3}k + 1\frac{5}{6}k$$

$$71) \frac{1}{2}m + 1 = 5 - 1\frac{1}{2}m$$

$$72) -4\frac{37}{60} + 1\frac{2}{3}n - \frac{1}{3}n = -1\frac{1}{2}n - 3\frac{1}{5}$$

$$73) \frac{3}{5}p + 1\frac{1}{4} = \frac{79}{20} - 1\frac{1}{5}p$$

$$74) \frac{5}{3} + \frac{11}{6}x + \frac{1}{2}x = 2\frac{1}{3}x + 1 + 1\frac{1}{3}x$$

$$75) -1\frac{1}{2}b + 2\frac{1}{5}b = 1\frac{1}{50} - b$$

$$76) \frac{9}{4}n - 1\frac{3}{5} = \frac{7}{2}n + 1 + 2n + 1\frac{23}{120}$$

$$77) r + 3\frac{5}{6} + 2r = 7\frac{11}{12} - 5\frac{1}{6}r$$

$$78) \frac{11}{4}x - 2\frac{1}{2} = 7\frac{1}{2} - x$$

$$79) \frac{1}{2}n - \frac{1}{2} = -5\frac{1}{2} - \frac{1}{2}n$$

$$80) \frac{1}{4}v - 2v = 1\frac{1}{2}v - \frac{247}{20}$$

$$81) b + \frac{9}{5} = 1\frac{1}{2}b + 2\frac{1}{20}$$

$$83) -4\frac{11}{60} - a = a - 1\frac{1}{4} - 3\frac{1}{3}$$

$$85) \frac{5}{6}k + \frac{1}{3} = -3\frac{5}{6} - \frac{5}{4}k$$

$$87) -1\frac{1}{4}x - 4 = \frac{3}{2} + 1\frac{1}{2}x$$

$$89) -\frac{5}{12} + x = 1\frac{3}{4}x - x$$

$$91) r + 3\frac{2}{3} = \frac{326}{75} + \frac{4}{5}r$$

$$93) \frac{521}{60} + \frac{1}{5}b = 3\frac{1}{2}b + 2 + 2\frac{5}{6}$$

$$95) \frac{5}{4}n + n = 2\frac{11}{18} - 1\frac{2}{3}n$$

$$97) -2a + 3\frac{3}{5} = 2\frac{2}{5}a + 2\frac{1}{2}$$

$$99) \frac{7}{5}x - 1 = -6x + 1\frac{7}{15}$$

$$101) 2\frac{39}{140} - 1\frac{5}{6}m = \frac{5}{4}m + \frac{18}{5}$$

$$103) \frac{1}{6}x + \frac{5}{2} = \frac{1}{2}x + \frac{11}{6}$$

$$105) 2\frac{1}{6}n + 4\frac{5}{8} - \frac{22}{7}n - 14\frac{109}{392} = -\frac{23}{6}n + \frac{1}{7}$$

$$107) \frac{683}{200} + \frac{3}{2}x - \frac{7}{2} + 2x = \frac{23}{8}x + \frac{3}{5}x$$

$$109) -1\frac{1}{2}b + \frac{1}{2} = -\frac{10}{3} + \frac{25}{6}b + 2b$$

$$111) 8\frac{529}{720} - \frac{7}{6}v + \frac{4}{5} - 4\frac{1}{3} = \frac{11}{8}v - 2$$

$$113) 1\frac{4}{5}x - 2\frac{1}{2} = -\frac{1}{4}x - 4\frac{59}{70}$$

$$115) -16\frac{347}{392} - 1\frac{3}{7}p = 4p - 1\frac{3}{8}$$

$$117) \frac{799}{56} + 2x = 4\frac{4}{7}x + 4\frac{5}{8}$$

$$119) -3\frac{63}{160} + 2\frac{3}{5}r = \frac{1}{3}r - \frac{3}{4}r$$

$$121) -\frac{5}{7} + 2b = \frac{1}{2}b - b$$

$$82) x + \frac{4}{3} = -\frac{445}{36} - 1\frac{5}{6}x$$

$$84) -\frac{79}{36} - \frac{5}{6}x = -\frac{7}{5}x - \frac{2}{5}$$

$$86) \frac{13}{36} - \frac{1}{3}p + 1\frac{1}{5}p = -1\frac{4}{5}p + \frac{1}{2}p$$

$$88) 2\frac{1}{6}m + \frac{47}{15} = 3\frac{1}{2}m - 3\frac{2}{3} + 3\frac{4}{5}$$

$$90) 2\frac{1}{2}n - \frac{4}{5} + 2 = -5\frac{62}{75} - 2\frac{3}{5}n + 1 + 1\frac{1}{3}n$$

$$92) -\frac{17}{6}n + 5 = \frac{61}{18} + 2n$$

$$94) -1\frac{1}{6}v + 2\frac{2}{3} = -\frac{11}{4}v + 1\frac{1}{2}v + 2\frac{3}{5}$$

$$96) -\frac{8}{3}x + 1\frac{5}{6} + \frac{3}{4} = \frac{7}{60} - \frac{1}{5}x$$

$$98) -1\frac{1}{5}k + 4 + \frac{7}{2}k - 9\frac{83}{150} = \frac{1}{3}k + 3\frac{3}{5}k$$

$$100) -6 - \frac{7}{2}x + \frac{3}{2}x = \frac{1}{6}x + 1\frac{2}{3} - 6x$$

$$102) 2\frac{1}{3}n + \frac{53}{60} = 1\frac{1}{5}n - \frac{1}{4}$$

$$104) -\frac{7}{24} - 2\frac{5}{6}p = \frac{1}{6}p + 1 + 2\frac{5}{6}$$

$$106) -\frac{47}{25} + 2r = \frac{22}{5}r + 1$$

$$108) 1\frac{1}{3}n - 3\frac{5}{7} = -4\frac{209}{224} + \frac{1}{4}n$$

$$110) -1\frac{1}{6}b - \frac{3}{2} - \frac{1}{2}b = -1\frac{41}{84} - \frac{12}{7}b$$

$$112) 2x - 3\frac{1}{6} = -2\frac{5}{6} + 1\frac{2}{3}x$$

$$114) k - \frac{1}{4} - 3\frac{1}{2} = -4\frac{3}{7} + 1\frac{1}{4}k$$

$$116) \frac{6}{7}a + 3\frac{3}{4} = 4\frac{151}{224} - \frac{3}{8}a$$

$$118) -\frac{39}{7} - \frac{2}{3}n = -2\frac{3}{4}n - \frac{9}{4}n$$

$$120) -3\frac{3}{4}m - 4 = 4\frac{9}{28} + m - 2\frac{1}{4} - 2$$

$$122) -13\frac{131}{168} + 4\frac{3}{7}x = -1\frac{3}{4}x + \frac{5}{3}$$

$$123) \frac{1943}{126} + \frac{6}{7}v = \frac{29}{6}v + 2\frac{1}{6}$$

$$125) \frac{1}{2}n + 1 = -\frac{1}{7}n - \frac{19}{98}$$

$$127) 1\frac{5}{6}k - 2k + 4\frac{2}{3} = -\frac{3}{2}k + 2$$

$$129) -2\frac{11}{21} + \frac{1}{2}x = 1\frac{4}{7}x - 2\frac{1}{6}$$

$$131) -\frac{7}{40} - 3\frac{1}{4}x = -\frac{7}{5}x - 1\frac{1}{2}x$$

$$133) 2\frac{2}{3}n - \frac{116}{15} = \frac{4}{5}n + \frac{2}{3}$$

$$135) \frac{21}{8}b + \frac{19}{6} = 4\frac{5}{192} + 2\frac{1}{6}b$$

$$137) \frac{2}{5}n + \frac{39}{8}n = 3\frac{39}{80} + 4\frac{1}{2}n$$

$$139) -1\frac{2}{5}a + \frac{1531}{150} = \frac{29}{8}a + \frac{13}{6}$$

$$141) 2n + \frac{7}{5} = \frac{1}{6} + 1\frac{2}{5}n + \frac{5}{6} - \frac{2}{5}$$

$$143) -4 + \frac{1}{4}x - 1\frac{1}{2}x = -4x - 1\frac{4}{5}$$

$$145) 4\frac{7}{8}p - 1\frac{3}{7} = \frac{2641}{224} + p - \frac{3}{2} - 1\frac{1}{3}p$$

$$147) -1\frac{3}{4}x + \frac{17}{21} = -1\frac{1}{6}x - \frac{6}{7} + 1\frac{1}{2}$$

$$149) 4\frac{5}{6}r + \frac{39}{8} + 3\frac{5}{7} - 2\frac{127}{168} = \frac{2}{3}r + \frac{5}{4}r$$

$$151) 3\frac{1}{2}x - \frac{4}{7} = 7\frac{25}{42} - 2\frac{5}{8}x$$

$$153) 1\frac{4}{5}x + \frac{79}{15} = \frac{7}{5}x + 4\frac{1}{3}$$

$$155) -2\frac{2}{3}n + \frac{2}{5}n = 11\frac{2}{3} + n$$

$$157) \frac{845}{56} - 3\frac{1}{6}a = -2\frac{2}{3}a + \frac{29}{7}a$$

$$159) -2k + 1\frac{1}{8} = k + \frac{5}{3} + 4\frac{4}{7}k - \frac{13}{24}$$

$$161) 4\frac{7}{8}n + 3n = 1\frac{41}{64} + n + \frac{5}{2}n$$

$$163) -\frac{103}{72} + 3\frac{2}{3}p + 1 + 3\frac{1}{2} = p - 1\frac{3}{8}$$

$$124) 1\frac{1}{2}n + 5\frac{51}{56} = -2\frac{2}{5}n + \frac{9}{7} + \frac{1}{5}n$$

$$126) -4\frac{29}{96} + \frac{15}{8}x = \frac{13}{6}x - 2\frac{2}{3} - 2$$

$$128) \frac{857}{672} - \frac{2}{3}a + 1\frac{1}{2}a = \frac{6}{7}a + 1 - 1\frac{1}{8}a$$

$$130) -\frac{3}{2}x - \frac{1}{2}x = -3\frac{1}{3}x - 2\frac{1}{3}$$

$$132) -\frac{5}{3}p + 1 = -\frac{671}{448} - \frac{3}{7}p + 1 - \frac{7}{8}p$$

$$134) 4\frac{2}{7}m + 3\frac{5}{7} - \frac{1}{5} = -\frac{941}{1260} - 1\frac{1}{6}m + 1\frac{4}{5}m$$

$$136) \frac{55}{63} - 1\frac{5}{7}x = 1\frac{2}{3}x + 2$$

$$138) -\frac{131}{8} + \frac{1}{3}r = \frac{3}{4}r + 1\frac{1}{2} - 3\frac{1}{6}r$$

$$140) 4\frac{1}{4}x - \frac{11}{32} = x + \frac{7}{2}x$$

$$142) 3\frac{1}{3} + 2\frac{5}{6}v = v + \frac{3}{2}$$

$$144) -2\frac{1}{2}a + \frac{3}{4} = -11\frac{193}{280} + a + \frac{5}{7} + 6\frac{1}{8}$$

$$146) -\frac{7}{4}k - 6\frac{45}{56} = -3\frac{1}{6}k - \frac{3}{7}$$

$$148) -1\frac{2}{5}n + 1 = -5\frac{1}{3} + \frac{1}{2}n$$

$$150) \frac{2}{3}m + 3\frac{2}{3} + \frac{4}{5}m = 8\frac{59}{120} - 1\frac{3}{4}m$$

$$152) 2\frac{2}{3}n - \frac{1003}{84} = -\frac{4}{7}n + \frac{17}{4}$$

$$154) -2\frac{3}{4}b + \frac{4}{3}b + 3\frac{1}{84} = -1\frac{1}{7}b + 3\frac{2}{7}$$

$$156) -5v + 4\frac{1}{5} + \frac{3}{4}v = -4\frac{7}{15} + \frac{3}{4}v - 1\frac{2}{3}v$$

$$158) x + 1\frac{1}{5} - 2\frac{1}{8} = -\frac{181}{40} + 4\frac{3}{5}x$$

$$160) 1\frac{2}{7}x - 3\frac{104}{245} = \frac{8}{5}x - 3\frac{1}{5}$$

$$162) 1\frac{31}{56} + 1\frac{1}{3}m = 1\frac{2}{3}m + 1\frac{3}{7}$$

$$164) \frac{8}{5}x + 4\frac{1}{2} - 1\frac{1}{3} = \frac{27}{10} + 2x$$

$$165) -n + 1\frac{6}{7} = \frac{83}{28} + 1\frac{4}{7}n - 1\frac{5}{6}n$$

$$167) -2\frac{3}{8} + 1\frac{1}{8}b = b + \frac{1}{2} - \frac{1}{2}b$$

$$169) 1\frac{1}{2}v - 1 + 4\frac{6}{7} = 3\frac{181}{252} + 2\frac{1}{3}v$$

$$171) \frac{6}{5}x - 3\frac{2}{3}x + 6\frac{64}{105} = x - 2\frac{4}{5}$$

$$173) -\frac{13}{7}n + 1\frac{1}{2} = -5\frac{5}{12} - 3\frac{5}{6}n$$

$$175) 1\frac{1}{2}x + 1 + 1\frac{5}{6} + 11\frac{77}{480} = \frac{19}{4}x + \frac{7}{5}$$

$$177) -1\frac{11}{40} + \frac{1}{2}n = n - \frac{2}{5}$$

$$179) -\frac{1}{3}r + 1 = -\frac{13}{15} + 2r$$

$$181) -\frac{3}{5}m - \frac{3}{7} + 3\frac{5}{6}m + 1\frac{1873}{2100} = m + 3\frac{1}{4}$$

$$183) \frac{237}{200} + 1\frac{1}{4}x = 1\frac{1}{2}x + \frac{33}{8} + \frac{4}{5}x$$

$$185) -\frac{1}{7}n - \frac{14}{3} = \frac{2}{3}n + 1$$

$$187) 1\frac{29}{48} + \frac{19}{4}a - 3\frac{3}{4} - 1\frac{2}{3}a = a + \frac{3}{2}$$

$$189) 1\frac{1}{5}x + 1 = -\frac{19}{7} + 2\frac{1}{2}x$$

$$191) -1\frac{7}{8}n - \frac{3}{7} - \frac{1}{2} = -\frac{55}{112} - 1\frac{3}{4}n$$

$$193) x - 1\frac{3}{7} = -16\frac{185}{252} - 3\frac{5}{6}x$$

$$195) \frac{11}{5}b + 2\frac{2}{5} + 4\frac{2}{3} = -5\frac{3}{4}b + \frac{901}{60}$$

$$197) 2\frac{73}{84} + 1\frac{1}{4}x = 3\frac{1}{2}x + 1\frac{2}{7} - \frac{2}{3}x$$

$$199) 4\frac{3}{4}k + \frac{3459}{224} = \frac{14}{3}k + 4\frac{2}{7} + 4\frac{1}{3}k$$

$$201) \frac{1}{2}\left(v - \frac{5}{2}\right) = 1\frac{5}{6}v - 6\frac{1}{12}$$

$$203) -3\frac{8}{9}\left(\frac{53}{9}x + 1\right) - 2 = \frac{6971}{405} + \frac{1}{5}x$$

$$205) -3\frac{5}{6}\left(-\frac{1}{2}n - 1\frac{1}{3}\right) = 6\frac{3}{8} - \frac{15}{8}n$$

$$166) -1\frac{1}{3}x + 4\frac{1}{2}x = -1\frac{5}{12} - 2\frac{1}{2}x$$

$$168) 2r + 1\frac{1}{8} + 2\frac{1}{3}r - 3\frac{49}{120} = \frac{11}{4}r + \frac{1}{4}$$

$$170) -7\frac{31}{70} + \frac{2}{7}n - 2 + 4\frac{4}{5} = n - \frac{18}{7} - 3\frac{1}{2}$$

$$172) \frac{389}{105} + \frac{11}{4}a - \frac{4}{5} - \frac{1}{4}a = 3\frac{1}{6}a + \frac{11}{7}$$

$$174) -\frac{17}{3} + \frac{5}{6}k = -1\frac{1}{2}k - 1$$

$$176) -\frac{2}{5}p + 1 + 1\frac{1}{2} = -\frac{1}{15} + \frac{2}{3}p - 2p$$

$$178) \frac{332}{21} + x = \frac{25}{7}x + 4\frac{2}{3}$$

$$180) 1\frac{3}{5}n + \frac{947}{105} = -\frac{4}{3}n + 3\frac{4}{7}$$

$$182) -2\frac{5}{6}b + \frac{460}{63} = -1\frac{3}{7}b + \frac{1}{2}b$$

$$184) \frac{1}{6}v + \frac{1}{2}v = 1\frac{7}{16} + 1\frac{1}{6}v$$

$$186) -3\frac{1}{2}x + \frac{4}{3} = x + 1\frac{3}{8}x + \frac{221}{60}$$

$$188) \frac{29}{6}p - \frac{3}{2} = \frac{1}{2}p - 6\frac{7}{10}$$

$$190) -8\frac{1}{2} - 1\frac{1}{3}m = -8m - \frac{7}{2}$$

$$192) -\frac{1}{2}p + 1 - 5 = -6\frac{29}{32} + \frac{1}{4}p$$

$$194) \frac{5}{8}n - \frac{1}{2}n = -5\frac{17}{56} + n + \frac{17}{7} + 3\frac{3}{4}$$

$$196) 3\frac{5}{8}n - 2\frac{7}{8} = \frac{10}{7}n - 7\frac{15}{56}$$

$$198) -\frac{1}{5}r + \frac{1}{4} = -\frac{131}{21} + \frac{1}{2}r + \frac{11}{7} + 3\frac{3}{4}$$

$$200) -\frac{1}{2}a + 10\frac{41}{70} = \frac{32}{7}a + \frac{15}{4}a$$

$$202) \frac{119}{150} + 1\frac{2}{5}x = -\frac{14}{3}\left(\frac{3}{5}x + 1\right)$$

$$204) 1\frac{2}{3}\left(-\frac{27}{7}k + 1\right) = -\frac{12}{7}k - 38\frac{17}{42}$$

$$206) -3\frac{1}{7}\left(3\frac{2}{5}p + \frac{5}{4}\right) = 3\frac{1}{9}p - 3\frac{13}{14}$$

$$207) -21\frac{237}{320} + \frac{13}{8}n = -n - \frac{3}{5}\left(\frac{17}{9}n + 1\right)$$

$$209) 4x - \frac{23}{10} = -\left(1\frac{7}{10}x - \frac{91}{10}\right)$$

$$211) -\frac{15}{8}\left(-\frac{31}{8}n + \frac{1}{2}\right) = -20\frac{31}{32} - 2\frac{3}{4}n$$

$$213) -\frac{1}{2}v - \frac{19}{30} = -\frac{1}{8}\left(\frac{4}{3}v + 8\right)$$

$$215) -1\frac{4}{5}x + 10\frac{1177}{2100} = 2\frac{1}{6}\left(1\frac{5}{7}x + 5\frac{9}{10}\right) + 5\frac{3}{5}x$$

$$216) -1\frac{2}{3}\left(a + 1\frac{1}{5}\right) + 1\frac{1}{2} = \frac{7}{9}a - 2\frac{17}{18}$$

$$218) -3\frac{3}{10}x - 32\frac{63}{80} = -2\frac{1}{2}\left(-8x + \frac{1}{2}\right) + \frac{1}{2}$$

$$220) -x + 30 = 7\left(\frac{3}{7}x + 3\frac{1}{2}\right)$$

$$222) -\frac{3}{8}\left(p + 1\frac{5}{9}\right) = -p - 1\frac{65}{96}$$

$$224) -14\frac{3067}{3150} + 1\frac{1}{2}m = -\frac{3}{7}m + 1\frac{3}{5}\left(-3\frac{1}{2}m - \frac{8}{9}\right)$$

$$225) -1\frac{8}{9} - \frac{3}{2}b = 2\left(\frac{1}{2}b + 1\right)$$

$$227) 35\frac{35}{54} - 1\frac{1}{7}x = \frac{13}{3}\left(4\frac{1}{6}x - 2\frac{1}{9}\right)$$

$$229) 2\left(v + 1\frac{3}{8}\right) = 4\frac{7}{20} + \frac{2}{5}v$$

$$231) 1\frac{37}{252} - \frac{3}{8}a = 2\frac{2}{9}\left(-\frac{1}{2}a + 2\right) - 2\frac{2}{3}$$

$$233) -\frac{103}{36} - 1\frac{1}{2}x = \frac{8}{9} - 2\left(x + \frac{3}{5}\right)$$

$$235) -3\frac{4}{9}\left(1\frac{8}{9}k + 3\frac{5}{8}\right) = -3\frac{2}{3}k - \frac{3617}{216}$$

$$237) 4\frac{7}{9}n + \frac{287}{216} = \frac{5}{6}\left(4\frac{1}{10}n - \frac{7}{5}\right)$$

$$239) -\frac{1}{2}m - 7\frac{20}{21} = -3\frac{1}{2}\left(m - \frac{10}{7}\right) + \frac{1}{3}m$$

$$241) -1\frac{6}{7} - \frac{3}{2}\left(1\frac{1}{3}x + 1\right) = \frac{7}{9}x - 5\frac{37}{84}$$

$$243) 1\frac{2}{3} - \left(\frac{7}{9}n + 2\frac{4}{7}\right) = \frac{5}{9}n - 5\frac{10}{21}$$

$$245) -1\frac{3}{4}\left(\frac{7}{2}x + \frac{3}{7}\right) = 18\frac{73}{240} + \frac{3}{5}x$$

$$208) -\frac{53}{90} + \frac{2}{3}m = \frac{3}{5}\left(m - 1\frac{1}{6}\right)$$

$$210) 1\frac{7}{10} - 1\frac{2}{3}\left(r + 1\frac{2}{3}\right) = -10\frac{139}{630} + 2\frac{1}{3}r$$

$$212) -\frac{1}{10}b + \frac{226}{45} = 2\left(-\frac{5}{9}b + 1\frac{1}{2}\right)$$

$$214) -7\frac{17}{20} - \frac{1}{5}n = -2\left(n + 2\frac{1}{8}\right)$$

$$217) 7\frac{1}{2} + 3\frac{1}{6}k = -\frac{11}{4}\left(1\frac{1}{3}k + 1\right)$$

$$219) 1\frac{38}{225} - 1\frac{9}{10}p = -1\frac{1}{9}\left(\frac{3}{4}p + \frac{1}{10}\right)$$

$$221) 2\frac{1}{2}\left(-7\frac{3}{4}n + \frac{2}{3}\right) = -\frac{541}{20} + 4\frac{5}{9}n$$

$$223) -21\frac{132}{245} + 3\frac{2}{5}x = -\frac{6}{7}\left(-1\frac{2}{7}x + 1\right)$$

$$226) 1\frac{3}{8}n + 21\frac{229}{320} = -\frac{14}{5} + 2\frac{1}{4}\left(\frac{13}{4}n + 1\right)$$

$$228) \frac{19}{5}\left(\frac{5}{9}r - 1\frac{3}{4}\right) + \frac{2}{5} = -4\frac{29}{36} + 1\frac{4}{9}r$$

$$230) \frac{949}{48} - 2\frac{1}{4}n = -8\left(\frac{11}{3}n + 1\frac{1}{2}\right) + 1\frac{2}{3}n$$

$$232) -3\frac{1}{7}\left(x + 5\frac{3}{4}\right) = -\frac{439}{42} + \frac{2}{3}x$$

$$234) \frac{23}{9} + 1\frac{1}{6}\left(\frac{1}{5}n - 2\frac{3}{7}\right) = 1\frac{1}{3}n - 4\frac{31}{630}$$

$$236) 2p - 5\frac{16}{25} = 2\frac{1}{10}\left(\frac{2}{5}p - \frac{1}{5}\right)$$

$$238) -\frac{11}{30} - \frac{1}{3}x = -\frac{17}{5}\left(-\frac{7}{10}x - 2\frac{1}{3}\right) - \frac{1}{2}x$$

$$240) 1\frac{1}{2}\left(\frac{9}{10}r + 1\right) = \frac{357}{160} + 1\frac{1}{5}r$$

$$242) -\frac{5}{7}\left(1\frac{1}{6}b + 1\frac{6}{7}\right) = 2\frac{7}{10}b - \frac{328}{2205}$$

$$244) -\frac{31601}{6720} + 2\frac{7}{8}v = -\frac{1}{7}\left(1\frac{1}{2}v + 4\frac{5}{6}\right) + 1\frac{2}{5}v$$

$$246) -21\frac{163}{252} + 1\frac{1}{8}n = -\frac{16}{7}\left(1\frac{3}{4}n + 1\right)$$

$$247) \quad 15\frac{1}{5} - 3\frac{3}{10}a = -2\left(-\frac{1}{2}a + 1\right)$$

$$249) \quad -\frac{1}{2}\left(p - \frac{1}{2}\right) - \frac{7}{8}p = -\frac{1}{9} - 1\frac{1}{8}p$$

$$251) \quad \frac{1}{3}\left(\frac{3}{2}x - \frac{3}{10}\right) = 9\frac{13}{20} - 6x$$

$$253) \quad 4\frac{17}{350} - 1\frac{1}{3}r = 5\frac{1}{5}\left(-\frac{4}{5}r + \frac{24}{7}\right)$$

$$255) \quad 2\left(b + \frac{1}{2}\right) - 3\frac{3}{4} = -2\frac{1}{2}b - \frac{1}{20}$$

$$257) \quad -2\frac{1}{5}x - 6\frac{377}{945} = 2\left(2\frac{1}{3}x + \frac{23}{7}\right)$$

$$259) \quad -\frac{95}{144} - \frac{4}{9}a = -\frac{1}{4}\left(a - 1\frac{1}{4}\right)$$

$$261) \quad -1\frac{3}{10} - 2\frac{1}{9}\left(v + 4\frac{7}{9}\right) = -11\frac{313}{810} + 1\frac{5}{6}v$$

$$263) \quad 2\frac{5}{7}\left(-\frac{3}{7}x + 1\right) = -5\frac{122}{147} + 1\frac{2}{5}x$$

$$265) \quad -1\frac{33}{35} + k = -2\frac{5}{7}\left(-k + \frac{2}{5}\right)$$

$$267) \quad -1\frac{1}{4} + \frac{4}{5}\left(2p + \frac{16}{3}\right) = -\frac{5}{6} - \frac{1}{2}p$$

$$269) \quad -1\frac{1}{9}\left(m + \frac{5}{4}\right) + \frac{3}{10} = \frac{7}{15} + 2m$$

$$271) \quad 9\frac{29}{60} - 2x = \frac{5}{3}\left(x + \frac{7}{4}\right) + \frac{29}{10}$$

$$273) \quad -v - 24\frac{25}{48} = 2\left(-2\frac{5}{8}v - \frac{13}{6}\right)$$

$$275) \quad \frac{13}{3} + x = -1\frac{1}{3}\left(3\frac{1}{4}x + \frac{3}{4}\right)$$

$$277) \quad \frac{10}{3}\left(n + 1\frac{1}{3}\right) - n = 15\frac{19}{36} - 1\frac{1}{6}n$$

$$279) \quad -\frac{1}{10}\left(\frac{2}{5}k + 1\right) = \frac{3}{5}k - 3\frac{29}{150}$$

$$281) \quad 5\frac{3}{8}\left(2\frac{7}{9}x - 1\frac{1}{2}\right) + 5\frac{2}{3} = -\frac{12041}{240} - 3\frac{4}{9}x$$

$$283) \quad r - \frac{1}{4}\left(r + 4\frac{1}{5}\right) = -r + 5\frac{3}{40}$$

$$285) \quad \frac{5}{9}n + 3\frac{3977}{4536} = 3\frac{7}{8}\left(\frac{1}{7}n + 1\right)$$

$$287) \quad -r - 35\frac{1}{25} = -1\frac{4}{5}\left(2\frac{9}{10}r + \frac{27}{5}\right)$$

$$248) \quad \frac{3}{4}\left(k - 3\frac{1}{4}\right) = 5k - 26\frac{25}{48}$$

$$250) \quad 4n + \frac{209}{45} = 2\frac{5}{6}\left(\frac{9}{5}n + 1\frac{5}{6}\right)$$

$$252) \quad 2\frac{5}{9}\left(-2m + \frac{13}{4}\right) = -19\frac{551}{900} + 3\frac{1}{10}m$$

$$254) \quad -6\frac{6}{7} - 3\frac{1}{3}n = -1\frac{3}{7}\left(n + \frac{2}{5}\right)$$

$$256) \quad -\frac{11}{4}x + 2\frac{3}{10}\left(x + \frac{30}{7}\right) = -10\frac{17}{70} - 10\frac{1}{2}x$$

$$258) \quad -2\frac{37}{168} + 5\frac{3}{4}r = 2\frac{1}{6}r + \frac{18}{7}\left(-2\frac{1}{3}r + 1\right)$$

$$260) \quad 1\frac{1}{3}\left(1\frac{1}{5}n + \frac{59}{10}\right) = -1\frac{1}{6}n + 11\frac{13}{40}$$

$$262) \quad 7\frac{1}{10} - \frac{6}{5}x = -\frac{1}{2}\left(\frac{3}{5}x + 1\right)$$

$$264) \quad 3\frac{23}{24} + 2n = -\left(n + \frac{5}{3}\right) + 1\frac{7}{8}$$

$$266) \quad \frac{2}{5}\left(-2x + 1\frac{1}{4}\right) = 1\frac{1}{2}x - \frac{737}{90}$$

$$268) \quad -\frac{2}{9} + \frac{7}{4}\left(-\frac{1}{2}n + \frac{9}{2}\right) = -6n + \frac{1471}{144}$$

$$270) \quad 5\frac{5}{7}\left(r + 5\frac{1}{6}\right) = 37\frac{11}{12} - r$$

$$272) \quad -1\frac{3037}{3150} + 2\frac{1}{6}n = 1\frac{3}{5}\left(1\frac{1}{10}n - 1\frac{1}{7}\right)$$

$$274) \quad -\frac{29}{30} - 1\frac{2}{5}b = -\frac{1}{3}b + \frac{7}{10}\left(\frac{1}{2}b + 1\frac{1}{4}\right)$$

$$276) \quad -\frac{11}{14} + 1\frac{1}{2}a = \frac{1}{2}\left(a - \frac{4}{7}\right)$$

$$278) \quad \frac{1}{4}\left(-\frac{2}{5}p + 1\right) = \frac{3}{8}p - \frac{17}{8}$$

$$280) \quad -\frac{81}{1372} - 1\frac{5}{8}n = -\frac{3}{7}\left(-\frac{15}{7}n + 1\frac{5}{6}\right)$$

$$282) \quad \frac{2281}{3360} + 1\frac{1}{8}m = 1\frac{1}{7}\left(\frac{9}{5}m - \frac{5}{6}\right)$$

$$284) \quad -\frac{5}{7}x - 1\frac{1}{49} = -1\frac{5}{7}\left(\frac{1}{4}x + 1\right)$$

$$286) \quad \frac{17}{4}\left(b + \frac{26}{5}\right) = -1\frac{1}{3}b + \frac{2103}{80}$$

$$288) \quad -\frac{7}{9} + 3\left(-2\frac{8}{9}x + \frac{1}{2}\right) = -40\frac{5}{18} + 1\frac{1}{3}x$$

$$289) \quad 9n + 29\frac{3}{5} = 1\frac{5}{6}\left(-\frac{1}{2}n + 1\right)$$

$$291) \quad \frac{1}{5}a - \frac{7}{5}\left(-2\frac{1}{3}a + \frac{2}{5}\right) = 6a - 8\frac{119}{150}$$

$$293) \quad 11\frac{13}{140} - \frac{1}{7}x = 3\frac{1}{2}\left(x + 1\frac{2}{5}\right)$$

$$295) \quad -\frac{2}{7}p + 6\frac{109}{448} = \frac{5}{8}\left(-1\frac{1}{7}p + 5\frac{7}{8}\right)$$

$$297) \quad \frac{5}{9}\left(-\frac{17}{6}x + \frac{5}{2}\right) = 20\frac{19}{45} + 9x$$

$$299) \quad -\frac{17}{405} - 1\frac{3}{5}n = -2\frac{1}{9}\left(\frac{1}{2}n + \frac{1}{9}\right) + \frac{5}{9}$$

$$301) \quad -1\frac{1}{4}\left(x + \frac{3}{4}\right) = \frac{7}{6}x + 7\frac{61}{80}$$

$$303) \quad 15\frac{1}{28} - \frac{1}{2}v = \frac{1}{2}\left(4\frac{4}{7}v + 1\frac{1}{10}\right)$$

$$305) \quad 1\frac{3}{4}b + 5\frac{8357}{9072} = -2\frac{3}{7}b - 1\frac{1}{9}\left(5\frac{5}{9}b - 3\right)$$

$$307) \quad -\frac{457}{700} - 1\frac{2}{5}k = -\frac{1}{8}\left(k + \frac{8}{7}\right)$$

$$309) \quad -8\frac{1}{30} + \frac{4}{5}a = -2a + 1\frac{1}{6}\left(4\frac{4}{9}a + 1\right)$$

$$311) \quad 16\frac{2}{3} + \frac{5}{6}n = -1\frac{2}{3}\left(-\frac{1}{2}n - 10\right)$$

$$313) \quad -2\frac{1}{3}\left(\frac{17}{3}r + \frac{13}{8}\right) = -3\frac{9}{10}r - \frac{18671}{720}$$

$$315) \quad -1\frac{1}{3}n - \frac{79}{144} = -1\frac{1}{2}\left(n + \frac{5}{8}\right) + \frac{1}{2}$$

$$317) \quad -1\frac{99}{700} + \frac{2}{7}x = -\frac{2}{5}\left(\frac{7}{8}x + 1\frac{9}{10}\right)$$

$$319) \quad \frac{1}{5}\left(1\frac{3}{5}a + \frac{1}{6}\right) = 3\frac{449}{1050} + 3\frac{5}{7}a$$

$$321) \quad \frac{1}{2}v + 3\frac{3}{7} = -\left(-\frac{3}{2}v + 1\right)$$

$$323) \quad 1\frac{1}{10}\left(n + 2\frac{1}{4}\right) = -15\frac{61}{120} + 5\frac{1}{4}n$$

$$325) \quad -\frac{109}{10} + \frac{4}{7}k = -1\frac{2}{7}\left(1\frac{1}{2}k + \frac{7}{10}\right)$$

$$327) \quad n + \frac{551}{315} = \frac{2}{7}\left(-1\frac{7}{9}n + 1\frac{9}{10}\right)$$

$$329) \quad -\frac{1007}{120} + 3\frac{1}{4}m = -\frac{5}{3}\left(-\frac{7}{2}m + 1\right) + \frac{1}{4}$$

$$290) \quad -5\frac{4}{5} - \frac{1}{5}v = \frac{4}{3}v + 2\left(v - \frac{29}{10}\right)$$

$$292) \quad 2\left(x - 1\frac{1}{2}\right) = -\frac{29}{10} + 1\frac{9}{10}x$$

$$294) \quad \frac{3}{7}\left(n + 1\frac{2}{3}\right) = \frac{19}{28} + \frac{1}{2}n$$

$$296) \quad 5\frac{1}{3}\left(1\frac{2}{3}k + 2\right) - \frac{7}{4} = 12\frac{127}{288} + 3\frac{1}{4}k$$

$$298) \quad \frac{1}{2}m + 1\frac{17}{72} = 2\frac{3}{8}\left(1\frac{8}{9}m + 1\right)$$

$$300) \quad 1\frac{2}{9}r + 2\left(\frac{31}{7}r + 1\right) = 6\frac{1549}{1764} + 3\frac{1}{4}r$$

$$302) \quad -2\frac{1}{2}n - 10\frac{8}{15} = \frac{2}{9}\left(n + 1\frac{1}{5}\right) - 1$$

$$304) \quad \frac{1}{2}\left(-1\frac{1}{2}n + 1\right) = -15\frac{7}{16} + 3n$$

$$306) \quad \frac{29}{5}\left(-x + \frac{1}{2}\right) - \frac{1}{2}x = 12\frac{13}{45} - \frac{2}{3}x$$

$$308) \quad \frac{24}{7} + \frac{1}{5}p = 1\frac{2}{3}\left(p - 1\frac{5}{7}\right)$$

$$310) \quad -1\frac{4}{9}x + \frac{2}{7}\left(\frac{10}{3}x + 1\frac{7}{10}\right) = 7\frac{29}{2835} - 1\frac{3}{5}x$$

$$312) \quad -1\frac{3}{8}m - \frac{11}{25} = -\frac{17}{10}\left(\frac{4}{5}m + \frac{1}{4}\right)$$

$$314) \quad \frac{46}{9}\left(x - 2\frac{1}{10}\right) + 1 = -3\frac{29}{810} - 3\frac{1}{2}x$$

$$316) \quad \frac{9}{5}\left(b + 5\frac{1}{5}\right) = 13\frac{32}{75} - 1\frac{1}{4}b$$

$$318) \quad 2 + 4\frac{2}{9}\left(\frac{5}{3}v + 1\right) = \frac{8266}{189} + 3\frac{2}{7}v$$

$$320) \quad \frac{40}{7}\left(-1\frac{3}{7}n + \frac{3}{7}\right) = -\frac{249}{35} + 1\frac{2}{5}n$$

$$322) \quad \frac{12}{7}\left(x - \frac{17}{6}\right) = -\frac{704}{245} - \frac{3}{5}x$$

$$324) \quad 3\frac{3}{4}\left(-\frac{2}{9}x + 1\right) + \frac{3}{7} = \frac{821}{168} + 2x$$

$$326) \quad -\frac{27}{8}\left(-1\frac{1}{4}p - 2\right) = -\frac{1}{9}p + \frac{2543}{192}$$

$$328) \quad -\frac{35}{72} - \frac{1}{3}x = \frac{1}{3}\left(3\frac{5}{6}x - 3\right) - \frac{3}{2}$$

$$330) \quad 1\frac{3}{5}r + \frac{3}{8}\left(r - 2\frac{8}{9}\right) = -2\frac{67}{300} + 1\frac{1}{2}r$$

$$331) \quad 2\frac{1}{4}\left(x - 1\frac{2}{3}\right) = -1\frac{1}{8} + 1\frac{4}{5}x$$

$$333) \quad -1\frac{1}{10}\left(\frac{16}{5}b + 5\frac{3}{10}\right) = -11\frac{461}{700} - 2\frac{1}{2}b$$

$$335) \quad -1\frac{1}{2}\left(n - 1\frac{1}{3}\right) = 1\frac{3}{5}n - 11\frac{13}{30}$$

$$337) \quad \frac{1}{2}\left(a + \frac{4}{5}\right) + 3\frac{1}{3}a = -5\frac{9}{10}a - 24\frac{22}{35}$$

$$339) \quad 27\frac{25}{168} - \frac{2}{3}x = 1\frac{1}{2}\left(\frac{17}{4}x + \frac{4}{3}\right)$$

$$341) \quad 3\frac{103}{168} + 2\frac{1}{7}n = -\frac{1}{6} + 1\frac{1}{2}\left(\frac{2}{3}n + \frac{5}{4}\right)$$

$$343) \quad -\frac{5}{9}x + 9\frac{191}{720} = -1\frac{1}{8}\left(5\frac{1}{2}x + 1\right) - 2$$

$$345) \quad 4\frac{3}{10}\left(n + 5\frac{7}{8}\right) = \frac{1769}{80} - 2n$$

$$347) \quad \frac{1}{2}\left(v + \frac{12}{7}\right) = 14\frac{71}{140} - 5\frac{4}{5}v$$

$$349) \quad \frac{1}{2}\left(4n + \frac{3}{5}\right) + \frac{43}{9}n = -\frac{17}{180} + 5\frac{1}{5}n$$

$$351) \quad -\frac{5}{4} - 1\frac{7}{8}\left(1\frac{1}{2}v + 1\right) = -9\frac{5}{32} - \frac{2}{5}v$$

$$353) \quad -3\frac{2}{3}\left(x + 3\frac{3}{8}\right) = \frac{1}{12} + \frac{2}{3}x$$

$$355) \quad -2\frac{5}{8}k + \frac{687}{80} = \frac{1}{6}\left(4\frac{1}{3}k + 5\frac{1}{3}\right)$$

$$357) \quad 5\frac{4}{9}x - 5\frac{559}{720} = \frac{19}{6}\left(2x - 1\frac{3}{8}\right)$$

$$359) \quad 3\frac{3}{10}\left(3\frac{7}{9}r + 1\right) = -8r - 27\frac{2}{5}$$

$$361) \quad 2\frac{175}{192} - x = -3\frac{5}{8}\left(4\frac{3}{4}x + 1\right) + 3\frac{5}{6}$$

$$363) \quad -\frac{443}{270} + 4\frac{5}{6}x = \frac{4}{9}\left(-3\frac{1}{3}x + 4\frac{5}{6}\right)$$

$$365) \quad -20\frac{19}{72} - 2\frac{5}{6}b = 5\frac{5}{6}\left(-1\frac{1}{2}b - 1\frac{1}{2}\right) - \frac{2}{3}$$

$$367) \quad -\frac{1}{4}\left(p + \frac{1}{6}\right) = -\frac{4}{7}p - 1\frac{109}{168}$$

$$369) \quad 4\left(a + 1\frac{2}{5}\right) = 18\frac{16}{35} + \frac{8}{7}a$$

$$371) \quad -\frac{1119}{392} - 2m = -1\frac{2}{7}\left(1\frac{3}{8}m + \frac{19}{8}\right)$$

$$332) \quad -6\frac{187}{324} - \frac{1}{3}n = -1\frac{2}{3}\left(\frac{2}{3}n + 1\right) - \frac{11}{4}$$

$$334) \quad 4\frac{1}{6} + 1\frac{2}{5}\left(-2\frac{3}{7}v - 1\frac{1}{2}\right) = 1\frac{5}{9}v + 13\frac{124}{315}$$

$$336) \quad -2\frac{9}{10}\left(-1\frac{3}{5}x + 1\frac{1}{10}\right) = -\frac{1153}{100} - 3\frac{7}{10}x$$

$$338) \quad 2\frac{30}{49} + 4\frac{3}{5}k = \frac{25}{7}\left(k + 1\frac{1}{7}\right)$$

$$340) \quad -\frac{1093}{210} + 5\frac{1}{3}p = -1\frac{3}{10} + 1\frac{3}{7}\left(5\frac{3}{5}p + 1\right)$$

$$342) \quad 2\frac{1}{2}m + 4\frac{1067}{1680} = \frac{1}{5}\left(-\frac{4}{7}m - \frac{4}{3}\right)$$

$$344) \quad -\frac{4}{3}\left(\frac{15}{8}r + 1\frac{1}{4}\right) = -4\frac{14}{27} - \frac{2}{3}r$$

$$346) \quad 2\frac{5}{6}b + \frac{173}{216} = 6 - 1\frac{1}{4}\left(b + \frac{1}{6}\right)$$

$$348) \quad \frac{59}{120} + 1\frac{1}{5}x = \frac{21}{8}\left(2x - \frac{5}{3}\right) + \frac{13}{4}x$$

$$350) \quad 3\frac{2}{9}\left(-1\frac{3}{10}a + 1\frac{1}{6}\right) = 1\frac{1}{6}a + 10\frac{247}{810}$$

$$352) \quad 3\frac{3}{140} + 2x = -\frac{1}{2}\left(x + 1\frac{1}{10}\right)$$

$$354) \quad -5\frac{103}{175} + 2n = -\frac{6}{5}\left(-\frac{3}{5}n + 1\right)$$

$$356) \quad \frac{1}{2}\left(1\frac{8}{9}p - \frac{5}{9}\right) + 7 = 9\frac{89}{90} + \frac{2}{5}p$$

$$358) \quad -\frac{24}{5} + 4\frac{3}{5}m = -\frac{1}{2}\left(m + \frac{9}{2}\right)$$

$$360) \quad -1\frac{6}{7}\left(\frac{4}{5}n - \frac{2}{7}\right) = 9\frac{111}{196} + 1\frac{4}{5}n$$

$$362) \quad -22\frac{2}{5} - 7n = -\frac{17}{2}\left(n + 4\frac{2}{5}\right)$$

$$364) \quad -2\frac{5}{8}\left(\frac{1}{3}v + \frac{7}{10}\right) + 4\frac{1}{9}v = -3\frac{1829}{5040} + 5\frac{1}{7}v$$

$$366) \quad -\frac{5}{8}\left(\frac{2}{3}x - \frac{11}{4}\right) = 1\frac{3}{5}x + 5\frac{197}{1120}$$

$$368) \quad -13\frac{1}{18} + 5\frac{4}{5}x = -2\frac{4}{5}\left(\frac{2}{3}x + 3\frac{3}{4}\right)$$

$$370) \quad -\frac{13}{10}\left(k + \frac{19}{4}\right) + 3\frac{4}{7} = -\frac{201}{1400} + 2\frac{4}{5}k$$

$$372) \quad \frac{5}{9}\left(x + 1\frac{2}{3}\right) = \frac{4}{5}x + 1\frac{278}{405}$$

$$373) \quad 16\frac{313}{360} + 3\frac{5}{6}n = \frac{17}{4}\left(-\frac{5}{3}n - \frac{9}{10}\right) - \frac{3}{2}n$$

$$375) \quad 38\frac{139}{960} - 1\frac{1}{8}v = 3\frac{1}{6}\left(\frac{9}{5}v + 1\right)$$

$$377) \quad \frac{2}{3}\left(-1\frac{5}{9}b + 1\right) - \frac{1}{3}b = -\frac{104}{27} + \frac{8}{9}b$$

$$379) \quad -\frac{1037}{504} + 3\frac{1}{7}n = -1\frac{1}{4}\left(\frac{16}{9}n - \frac{1}{2}\right)$$

$$381) \quad 6\left(3\frac{1}{2}x + 1\right) = 34\frac{17}{50} - \frac{4}{5}x$$

$$383) \quad -20\frac{445}{567} + 6\frac{3}{10}n = \frac{31}{9}\left(n - 1\frac{3}{7}\right)$$

$$385) \quad 8\left(-2\frac{1}{3}k + 1\frac{1}{2}\right) = 25\frac{1}{3} + 8k$$

$$387) \quad \frac{11}{6}\left(-\frac{1}{3}x + 1\frac{2}{9}\right) + 1\frac{4}{5}x = -1\frac{3}{8}x - 2\frac{479}{540}$$

$$389) \quad 1\frac{2}{3}m - \frac{49}{72} = -3\frac{5}{6}\left(m - \frac{7}{3}\right)$$

$$391) \quad -\frac{2243}{60} - 1\frac{1}{2}r = -7\frac{1}{6}\left(r + 4\frac{1}{10}\right) - \frac{1}{3}r$$

$$393) \quad 1\frac{3}{7}x + \frac{3}{5}\left(2x - \frac{5}{3}\right) = -10x - 1$$

$$395) \quad -\frac{1}{2}n + \frac{881}{25} = -3\frac{1}{2}\left(4\frac{2}{5}n + 1\right)$$

$$397) \quad -3a + \frac{56}{15} = -\frac{1}{5}\left(a - \frac{2}{3}\right)$$

$$399) \quad \frac{1}{10}\left(4\frac{1}{6}p + 1\right) = 2\frac{307}{420} - p$$

$$401) \quad -1\frac{2}{3}\left(\frac{3}{4}n + \frac{41}{12}\right) = 7\frac{3}{4}n - 4\frac{347}{396}$$

$$403) \quad 1\frac{1}{12} - \frac{1}{4}\left(3\frac{2}{9}r - 1\frac{1}{3}\right) = -\frac{5}{42} - 2r$$

$$405) \quad -17\frac{95827}{120120} + 5\frac{4}{11}x = 6\frac{13}{14}\left(\frac{3}{5}x - 1\frac{7}{13}\right)$$

$$407) \quad -\frac{1}{7}n - 2\frac{1}{3}\left(n + \frac{47}{12}\right) = -9\frac{5}{36} + 7\frac{2}{9}n$$

$$409) \quad \frac{461837}{66066} + 7\frac{5}{13}n = 6\frac{1}{7}n + 1\frac{6}{11}\left(1\frac{1}{2}n + 4\frac{1}{3}\right)$$

$$410) \quad -8\frac{147}{208} - \frac{1}{4}a = \frac{5}{4} + 6\frac{1}{14}\left(1\frac{3}{5}a - \frac{1}{8}\right)$$

$$412) \quad 5\frac{5}{8}\left(-\frac{1}{2}x + 1\right) = -2x + 1\frac{5}{32}$$

$$374) \quad 1\frac{13}{72} - 3\frac{3}{4}r = -1\frac{1}{3}\left(\frac{13}{6}r + 1\frac{3}{4}\right) + \frac{1}{2}$$

$$376) \quad 2\frac{1}{12} + 6n = 4\frac{1}{2} + 1\frac{2}{3}\left(n + \frac{57}{10}\right)$$

$$378) \quad \frac{17}{10}x - 3\frac{1}{9}\left(-\frac{5}{2}x + \frac{1}{2}\right) = 27\frac{161}{270} + 4\frac{1}{3}x$$

$$380) \quad 2\frac{5}{9}\left(\frac{2}{7}a + \frac{3}{4}\right) - \frac{1}{7} = 9a + 31\frac{403}{2268}$$

$$382) \quad 3\frac{5}{7} - 2\frac{1}{5}\left(x + 3\frac{5}{9}\right) = -3\frac{7}{9}x - 1\frac{362}{2835}$$

$$384) \quad -\frac{3077}{5040} - \frac{6}{7}k = -\frac{2}{5}\left(3\frac{1}{4}k + 1\frac{1}{9}\right)$$

$$386) \quad \frac{17}{6}\left(2p + 1\frac{4}{7}\right) = 17\frac{11}{14} - p$$

$$388) \quad -1\frac{4}{5}\left(7n + 2\frac{1}{6}\right) - \frac{5}{8}n = -43\frac{259}{320} - 1\frac{2}{5}n$$

$$390) \quad -\frac{1}{16} - \frac{1}{2}x = -\frac{1}{2}\left(x + \frac{1}{8}\right)$$

$$392) \quad \frac{527}{168} + 3b = 3\frac{4}{7}\left(-\frac{1}{4}b + \frac{1}{3}\right)$$

$$394) \quad \frac{1}{2}\left(-\frac{1}{10}v + \frac{1}{8}\right) = \frac{3}{10}v - \frac{19}{144}$$

$$396) \quad \frac{2}{7}\left(\frac{1}{5}x - 2\frac{5}{6}\right) = 2x + \frac{17}{7}$$

$$398) \quad \frac{7}{8}k + 30\frac{1}{4} = -\frac{13}{4}\left(-1\frac{3}{10}k + 1\right)$$

$$400) \quad -1\frac{1}{9} + \frac{28}{5}\left(-\frac{1}{2}x + 9\frac{7}{10}\right) = x + \frac{50459}{1575}$$

$$402) \quad -\frac{2}{5}m - 12\frac{689}{1260} = \frac{5}{3}\left(\frac{31}{6}m + 5\frac{13}{14}\right) + \frac{1}{10}$$

$$404) \quad -1\frac{11}{13}\left(-3\frac{5}{14}x + 1\right) = -\frac{1}{3}x + 19\frac{2686}{3549}$$

$$406) \quad -\frac{79}{154} - 1\frac{6}{7}b = -\frac{17}{11}\left(b + 1\frac{3}{10}\right)$$

$$408) \quad -5\frac{9}{28} + 5\frac{4}{5}v = \frac{17}{3}\left(v - \frac{4}{7}\right) - 1\frac{1}{4}$$

$$411) \quad -1\frac{3}{4}x - 2\frac{1}{2}\left(x + \frac{1}{4}\right) = -\frac{153}{5} + 1\frac{1}{5}x$$

$$413) \quad 16\frac{11}{12} + n = 2\left(2\frac{2}{9}n + 1\right) + \frac{43}{6}$$

$$414) \frac{133}{40} + 7\frac{1}{6}k = 1\frac{13}{14}\left(6\frac{1}{2}k + 5\frac{9}{10}\right)$$

$$416) -\frac{458}{63} + 1\frac{1}{2}m = -1\frac{8}{9}\left(m + \frac{79}{14}\right)$$

$$418) -1\frac{1}{5} + 2\frac{2}{5}\left(\frac{11}{6}x - 1\frac{5}{7}\right) = -8\frac{307}{420} + 1\frac{2}{3}x$$

$$420) -\frac{29}{8} - \frac{3}{11}\left(n + 4\frac{1}{2}\right) = -9\frac{183}{1144} + n$$

$$422) 4\frac{1}{5}b + \frac{105436}{17745} = -\frac{8}{13}\left(1\frac{10}{13}b + \frac{1}{6}\right)$$

$$424) -7\frac{2357}{6930} + 1\frac{1}{3}v = \frac{38}{9}\left(\frac{2}{5}v - \frac{15}{11}\right) - 1\frac{1}{10}$$

$$426) 9\frac{49}{52} + 6\frac{1}{8}a = \frac{12}{13}\left(a - \frac{1}{2}\right)$$

$$428) -3\frac{3}{10}p + 3\frac{1}{10}\left(p - 1\frac{1}{6}\right) = -3\frac{323}{660} - \frac{4}{11}p$$

$$430) -67\frac{31}{32} - n = -\frac{3}{4}\left(8n + \frac{65}{8}\right)$$

$$432) -7\frac{1}{10}\left(-2\frac{5}{9}m + \frac{16}{5}\right) = -54\frac{1753}{3150} + 9\frac{13}{14}m$$

$$434) -2x - 7\frac{1381}{3960} = -\frac{20}{11} - \frac{5}{8}\left(x + \frac{44}{9}\right)$$

$$436) -\frac{4}{7}\left(4\frac{1}{2}v + 1\right) + \frac{29}{14}v = 1\frac{47}{175} + 1\frac{4}{5}v$$

$$438) -7\frac{63}{104} + \frac{1}{13}n = -3\frac{2}{5}\left(1\frac{3}{5}n + 1\frac{3}{8}\right) + \frac{5}{3}$$

$$440) -12\frac{5}{8}\left(-\frac{79}{6}k + \frac{41}{14}\right) = -36\frac{109}{112} - \frac{1}{2}k$$

$$442) 2\frac{141}{364} + \frac{3}{8}x = 2\left(-\frac{15}{14}x + 1\right)$$

$$444) \frac{2349}{715} + \frac{10}{11}m = -\frac{7}{13}\left(m - \frac{9}{5}\right)$$

$$446) -\left(-2x + \frac{102}{13}\right) = -7\frac{30}{143} + 1\frac{8}{9}x$$

$$448) 2\frac{1}{7}\left(-\frac{13}{6}n + \frac{18}{11}\right) + 6\frac{5}{6}n = -10\frac{4}{231} + \frac{1}{2}n$$

$$450) \frac{15}{4}x + \frac{1}{13}\left(x + 7\frac{1}{4}\right) = -\frac{3649}{468} + 4\frac{11}{12}x$$

$$452) -27\frac{17}{26} - \frac{7}{8}n = 13\left(n + \frac{1}{2}\right)$$

$$453) \frac{6}{5}b - \frac{37}{12}\left(4\frac{3}{7}b - 1\frac{9}{13}\right) = -39\frac{69967}{131040} + 3\frac{1}{9}b$$

$$415) 2\frac{7}{11}p + 2\frac{49}{2178} = -\frac{1}{2}\left(2p + 3\frac{8}{9}\right)$$

$$417) -\frac{35}{3}\left(\frac{1}{3}n + \frac{17}{11}\right) = -\frac{1}{4}n - \frac{42775}{2772}$$

$$419) -\frac{5}{3}r - \frac{2321}{96} = 4\frac{1}{3}\left(-\frac{17}{12}r + 1\right)$$

$$421) -11\frac{71}{78} + 7\frac{1}{3}x = \frac{3}{13}\left(\frac{11}{4}x + 1\right) - 2\frac{4}{7}$$

$$423) -\frac{3}{13}\left(1\frac{5}{12}x + 5\frac{5}{8}\right) = -\frac{5355}{208} + 6\frac{11}{12}x$$

$$425) 9\left(-\frac{5}{4}x + 2\right) = \frac{119}{9} + 3\frac{1}{12}x$$

$$427) -\frac{3}{4}\left(k - 2\frac{1}{2}\right) = -3\frac{93}{196} + 7\frac{4}{7}k$$

$$429) -15\frac{13}{18} - 1\frac{5}{6}x = 6\frac{1}{4}\left(x - 1\frac{2}{9}\right)$$

$$431) -\frac{3523}{154} + \frac{1}{2}r = -\frac{1}{3}\left(8r + 3\frac{6}{7}\right)$$

$$433) \frac{3}{10}\left(-1\frac{4}{7}n + 1\right) = 17\frac{317}{455} + 1\frac{6}{13}n$$

$$435) 5\frac{4}{7}\left(-1\frac{1}{2}b + 1\right) + \frac{15}{11}b = -6\frac{111}{1001} + \frac{3}{5}b$$

$$437) -\frac{7563}{455} + 4\frac{1}{14}x = -\frac{7}{4}\left(\frac{33}{13}x + \frac{12}{7}\right)$$

$$439) -\frac{3}{5}\left(-\frac{1}{8}a - 1\frac{9}{13}\right) = 6\frac{7}{8}a + 4\frac{383}{390}$$

$$441) 4\frac{8}{9}k - 37\frac{1285}{1512} = 6\frac{2}{7} + \frac{25}{6}\left(-9k + \frac{3}{7}\right)$$

$$443) -24\frac{3}{10} + 1\frac{2}{5}x = 6\frac{1}{7}\left(-\frac{9}{4}x + 1\right)$$

$$445) 5\frac{11}{42} + 4\frac{1}{6}n = 6\frac{5}{6}\left(n - \frac{11}{7}\right) - \frac{8}{9}$$

$$447) \frac{1}{6}\left(1\frac{2}{5}p + \frac{1}{3}\right) + 5\frac{9}{13}p = \frac{2}{13}p + \frac{1132}{117}$$

$$449) -1\frac{11}{12}\left(r - 1\frac{5}{6}\right) = -22\frac{35}{72} + \frac{3}{4}r$$

$$451) \frac{3}{4}m - \frac{649}{1701} = \frac{2}{3}\left(\frac{8}{9}m - \frac{26}{7}\right) + 1\frac{1}{2}$$

$$454) -\frac{229}{396} - \frac{5}{4}x = 4 \frac{1}{4} \left(\frac{1}{3}x - 1 \frac{2}{11} \right)$$

$$456) -10 \frac{206}{385} + \frac{1}{5}x = \frac{2}{11}x - 1 \frac{1}{5} \left(1 \frac{1}{14}x - 1 \right)$$

$$458) \frac{92}{21} - \frac{1}{5}p = \frac{8}{5} \left(-1 \frac{3}{7}p + 1 \right)$$

$$460) \frac{43}{6} \left(\frac{77}{12}a + 1 \right) = 18 \frac{283}{728} - 2 \frac{9}{14}a$$

$$462) -\frac{32349}{728} - 1 \frac{1}{8}m = -\frac{5}{2} \left(1 \frac{8}{13}m + 7 \frac{2}{7} \right)$$

$$464) 1 \frac{1}{6} \left(2 \frac{2}{3}x + \frac{4}{9} \right) = \frac{14}{27} + 3 \frac{9}{13}x$$

$$466) -\frac{151}{24} - 1 \frac{1}{6}b = -\frac{7}{2} \left(b + 1 \frac{3}{4} \right)$$

$$468) -\frac{1}{13}n + 19 \frac{243}{260} = \frac{9}{14} \left(3 \frac{3}{4}n + 1 \frac{3}{5} \right)$$

$$470) -64 \frac{411}{4160} - 2 \frac{7}{10}x = \frac{1}{13}x - 3 \frac{5}{8} \left(2x + \frac{23}{8} \right)$$

$$472) -1 \frac{4}{11}x - 1 \frac{193}{792} = -1 \frac{1}{4} \left(x + \frac{8}{9} \right)$$

$$474) -2 \left(6 \frac{2}{7}n + 1 \right) = -9 \frac{13}{15} - 1 \frac{1}{3}n$$

$$476) \frac{3077}{495} - \frac{10}{9}m = \frac{14}{11}m + 5 \frac{3}{8} \left(-\frac{3}{5}m + 1 \right)$$

$$478) 6 \frac{1}{7} - 3 \frac{3}{8}m = \frac{1}{2} \left(1 \frac{5}{7}m + 1 \right)$$

$$480) -18 \frac{157}{168} + 7 \frac{7}{11}x = 5 \frac{1}{12} \left(\frac{1}{2}x + 1 \right)$$

$$482) -\frac{1}{4} \left(n - \frac{8}{5} \right) + \frac{91}{12} = 2 \frac{17}{30} + n$$

$$484) 5 \frac{191}{539} + 2b = 2 \left(6 \frac{2}{7}b + 2 \right) - \frac{12}{11}b$$

$$486) -2 \frac{1497}{1694} - \frac{15}{14}x = -4x + \frac{10}{11} \left(-\frac{4}{7}x + 2 \right)$$

$$488) -11 \frac{23}{110} - \frac{3}{7}a = -\frac{1}{8} \left(3 \frac{9}{11}a - 1 \frac{5}{14} \right) - 3 \frac{7}{8}a$$

$$490) -5 \frac{29}{156} + 4 \frac{8}{13}x = -\frac{1}{3} \left(\frac{53}{12}x + 1 \right) - 2x$$

$$492) -3 \frac{1}{2} \left(7 \frac{5}{6}r - 3 \frac{5}{6} \right) = -67 \frac{41}{132} + \frac{1}{3}r$$

$$494) -5b + 13 \frac{3}{7} = \frac{7}{2} \left(-\frac{37}{12}b + 1 \right)$$

$$455) \frac{3}{13} \left(3 \frac{4}{13}v + 4 \frac{9}{10} \right) = -2 \frac{11}{13}v - \frac{11621}{2535}$$

$$457) -\frac{7}{4} \left(7 \frac{7}{9}k + 1 \right) = -3 \frac{3}{8}k - 9 \frac{31}{504}$$

$$459) -\frac{1665}{112} + 4 \frac{7}{8}x = 2 \left(x + 1 \frac{1}{2} \right)$$

$$461) \frac{1}{2} \left(1 \frac{1}{2}n + \frac{1}{6} \right) + 3 \frac{5}{6}n = -1 \frac{3}{8}n - 7 \frac{1}{15}$$

$$463) -\frac{5}{4}r + \frac{94}{231} = \frac{2}{7} + \frac{8}{11} \left(1 \frac{7}{11}r + \frac{1}{6} \right)$$

$$465) \frac{3}{8} \left(\frac{4}{5}n + 1 \right) = 1 \frac{2}{9}n + 2 \frac{727}{1800}$$

$$467) -v + 42 \frac{2}{5} = \frac{28}{5} \left(v + 7 \frac{1}{10} \right)$$

$$469) \frac{2}{7} + 1 \frac{5}{8} \left(a + 14 \frac{2}{3} \right) = 23 \frac{121}{840} + 3 \frac{1}{4}a$$

$$471) -8 \left(1 \frac{7}{11}x - 2 \frac{1}{6} \right) = 10x + \frac{5780}{99}$$

$$473) -1 \frac{4}{7}k + 2 \frac{2}{13} \left(\frac{23}{14}k + \frac{69}{14} \right) = \frac{14150}{819} - 1 \frac{2}{3}k$$

$$475) -\frac{3077}{880} + 1 \frac{3}{11}x = -\left(1 \frac{1}{8}x + \frac{20}{11} \right)$$

$$477) -1 \frac{3}{4}p - 3 \frac{421}{1248} = \frac{21}{8} \left(-1 \frac{1}{2}p + 1 \frac{12}{13} \right)$$

$$479) \frac{39}{5} \left(\frac{1}{3}n - \frac{3}{5} \right) - \frac{10}{11}n = -\frac{5}{9}n - \frac{62549}{7425}$$

$$481) -1 \frac{2}{7}r + 4 \frac{1}{13} \left(-2 \frac{9}{14}r + 1 \right) = \frac{6}{7}r + \frac{5815}{273}$$

$$483) 5 \frac{1}{4} \left(1 \frac{4}{5}v + \frac{1}{4} \right) = 16 \frac{653}{720} - 3 \frac{11}{12}v$$

$$485) -12 \frac{63}{65} + 13x = 6 \frac{10}{13} \left(14x + \frac{1}{2} \right)$$

$$487) 8 \frac{19}{45} + 3 \frac{1}{3}k = \frac{4}{5} \left(k + 5 \frac{7}{9} \right)$$

$$489) 5 \frac{2}{5} \left(p + 1 \frac{1}{2} \right) = 20 \frac{3}{5} - \frac{11}{10}p$$

$$491) -\frac{2}{5} \left(\frac{20}{3}m + \frac{1}{8} \right) = \frac{1}{10}m - \frac{2923}{360}$$

$$493) 18 \frac{51}{56} - \frac{3}{2}n = 7 \frac{1}{4} \left(-\frac{15}{14}n + \frac{33}{10} \right)$$

$$495) -\frac{5}{6}x + 2 \left(\frac{2}{3}x + \frac{16}{3} \right) = \frac{169}{15} + 1 \frac{1}{10}x$$

$$496) \quad 4\frac{3}{8} + \frac{1}{2}\left(1\frac{3}{5}n + \frac{11}{14}\right) = \frac{1861}{3080} + 5\frac{8}{9}n$$

$$497) \quad -1\frac{4}{7}\left(v + \frac{3}{10}\right) - \frac{3}{2}v = -v + 26\frac{16}{35}$$

$$498) \quad \frac{173}{26} - \frac{1}{2}x = 2\left(5x - 1\frac{12}{13}\right)$$

$$499) \quad -1\frac{6}{11}\left(10\frac{3}{11}a + 2\frac{1}{2}\right) = \frac{112789}{6050} + \frac{1}{5}a$$

$$500) \quad -\frac{7805}{216} - 1\frac{5}{9}n = 3\frac{1}{2}\left(2n - 2\frac{7}{12}\right)$$

$$501) \quad \frac{1}{2}x - 1\frac{5}{13}x = -1\frac{5}{11}\left(1\frac{7}{10}x + \frac{11}{9}\right) - \frac{1}{2}\left(-\frac{9}{7}x + \frac{5}{6}\right)$$

$$502) \quad k + 1\frac{2}{3}\left(\frac{10}{9}k + \frac{23}{10}\right) = 14\left(\frac{40}{9}k + 9\right) - \frac{46}{13}$$

$$503) \quad 7\frac{1}{4}\left(-2\frac{3}{5}m + \frac{10}{9}\right) = -1\frac{1}{2}\left(m + \frac{11}{4}\right) - 2m$$

$$504) \quad -1\frac{6}{7}\left(n + \frac{4}{3}\right) = -3\frac{2}{3}\left(2\frac{4}{5}n + \frac{77}{12}\right)$$

$$505) \quad -1\frac{3}{14}\left(\frac{3}{4}x + \frac{44}{13}\right) = 2\frac{1}{8}x + \frac{3}{5}\left(1\frac{9}{10}x + 1\frac{1}{3}\right)$$

$$506) \quad 5\frac{2}{9}\left(\frac{18}{13}p - 2\frac{1}{7}\right) + 1\frac{5}{7} = -p + 13\left(2\frac{7}{12}p + 1\right)$$

$$507) \quad \frac{19}{10}\left(1\frac{1}{4}n + 1\frac{3}{7}\right) = -1 - \left(2\frac{1}{2}n + 1\right)$$

$$508) \quad b + 7\frac{8}{13} + 3\frac{1}{2}b = \frac{1}{2}\left(4\frac{3}{5}b + \frac{13}{11}\right) + 2\frac{2}{3}\left(\frac{1}{3}b + 12\right)$$

$$509) \quad -1\frac{2}{3}\left(\frac{9}{10}x - \frac{5}{2}\right) - \frac{2}{5}x = -\left(x - 2\frac{9}{14}\right)$$

$$510) \quad 3\frac{4}{7}x + \frac{13}{14} + x - \frac{47}{14} = -9\left(x + 5\frac{1}{2}\right) + \frac{25}{13}\left(-\frac{3}{8}x + 1\frac{1}{8}\right)$$

$$511) \quad -\frac{3}{14}\left(r + 1\frac{1}{2}\right) = -\frac{5}{4} - \frac{3}{7}\left(r + \frac{5}{2}\right)$$

$$512) \quad -1\frac{3}{14}\left(2\frac{1}{11}n + 1\frac{5}{7}\right) + \frac{37}{5}n = 5\frac{3}{7}n + \frac{2}{3}\left(3\frac{7}{10}n + \frac{4}{7}\right)$$

$$513) \quad -\frac{9}{11}\left(4\frac{1}{4}x + 1\right) - 1 = 7\frac{3}{7}\left(-2x - \frac{12}{7}\right)$$

$$514) \quad \frac{1}{5}v - \frac{11}{13}v = 2\left(7\frac{4}{9}v + 1\right) + 1\frac{1}{2}\left(2\frac{3}{10}v + 1\frac{7}{13}\right)$$

$$515) \quad \frac{1}{2}\left(\frac{10}{13}b + 7\frac{7}{9}\right) + \frac{1}{8}b = 1\frac{3}{7} + 2\frac{7}{12}\left(5\frac{1}{2}b + 6\frac{5}{12}\right)$$

$$516) \quad -\frac{6}{7} + \frac{7}{4}\left(\frac{7}{13}x + \frac{2}{3}\right) = -\frac{18}{13}\left(\frac{3}{7}x + \frac{19}{14}\right)$$

$$517) \quad a - \frac{13}{4}\left(6\frac{1}{2}a - 10\right) = -\frac{8}{11}\left(\frac{7}{4}a - \frac{1}{4}\right)$$

$$518) \quad -1\frac{2}{11}k + \frac{1}{3}\left(-\frac{5}{3}k + \frac{77}{10}\right) = -1\frac{1}{4}\left(k - 1\frac{2}{9}\right) - \frac{19}{14}k$$

$$519) \quad -\left(-\frac{5}{4}x - \frac{6}{11}\right) = 7\frac{9}{14}\left(-\frac{9}{5}x + 1\right)$$

$$520) \quad -\left(\frac{4}{13}p + 1\frac{1}{2}\right) + \frac{30}{7}\left(p - \frac{4}{3}\right) = 1\frac{1}{2}p + \frac{3}{4}p$$

$$521) \quad \frac{1}{2}\left(1\frac{1}{2}m + 1\right) = \frac{8}{9}m - 2\left(\frac{11}{14}m + 1\frac{1}{2}\right)$$

$$522) \quad 4\frac{2}{3}n - \frac{6}{13} + \frac{7}{2}n = 5\frac{1}{3}\left(n + \frac{7}{13}\right) + \frac{19}{4}\left(-1\frac{7}{10}n - \frac{5}{6}\right)$$

$$523) \frac{34}{7} \left(5 \frac{7}{10}x + 1 \frac{4}{7} \right) = -1 \frac{1}{3} + \frac{112}{9} \left(x + \frac{3}{2} \right) \quad 524) \frac{3}{4}r + \frac{17}{6} \left(\frac{62}{11}r + 2 \right) = \frac{95}{14} \left(\frac{2}{7}r + 1 \right) + 6 \frac{2}{11}$$

$$525) -\frac{20}{7} \left(3 \frac{2}{11}n - \frac{2}{3} \right) = -1 \frac{1}{4} + 1 \frac{2}{5} \left(\frac{26}{9}n - \frac{19}{11} \right)$$

$$526) 2b + 2 \frac{1}{2} + 3 \frac{5}{13} = \frac{94}{13} \left(b - \frac{1}{2} \right) - 1 \frac{1}{3} \left(4 \frac{1}{7}b + 5 \frac{3}{10} \right)$$

$$527) -13 \frac{1}{2} \left(v - \frac{1}{4} \right) = 3 \frac{10}{13} \left(-\frac{1}{2}v + \frac{67}{12} \right)$$

$$528) -\frac{1}{10} \left(\frac{5}{13}x - 3 \frac{4}{11} \right) + 1 \frac{3}{4} = -\frac{9}{10} \left(-\frac{1}{3}x + 8 \right) + \frac{2}{3}x$$

$$529) -\left(\frac{5}{8}k + 1 \right) = \frac{1}{2} \left(k - \frac{3}{4} \right)$$

$$530) -1 \frac{3}{8}n + 3 \frac{1}{7} \left(1 \frac{3}{7}n + 1 \frac{1}{6} \right) = 1 \frac{7}{8} \left(\frac{5}{12}n + 1 \right)$$

$$531) -1 \frac{9}{13} \left(-\frac{3}{7}a + 1 \right) + \frac{99}{14}a = -\frac{1}{11} \left(2 \frac{3}{7}a + 7 \frac{1}{6} \right)$$

$$532) 6 \frac{1}{12} \left(4 \frac{1}{14}x + 1 \frac{1}{4} \right) = 1 \frac{1}{2} \left(\frac{21}{8}x - 1 \frac{1}{3} \right)$$

$$533) -\frac{5}{4} \left(x + 1 \frac{3}{7} \right) = -3 \frac{7}{10} \left(4 \frac{1}{3}x - 1 \right)$$

$$534) 1 \frac{3}{8}n - \frac{10}{13} \left(n + \frac{1}{9} \right) = -1 \frac{2}{3}n + 1 \frac{9}{14} \left(n + 7 \frac{5}{6} \right)$$

$$535) -\frac{11}{5} + 1 \frac{1}{4} \left(-3 \frac{1}{5}p + \frac{1}{5} \right) = \frac{9}{14} \left(5 \frac{3}{4}p + \frac{13}{4} \right)$$

$$536) -2 \frac{1}{3} - \frac{3}{13} \left(m + 1 \frac{5}{11} \right) = 3 \frac{5}{14}m - 2 \left(\frac{34}{5}m + \frac{1}{3} \right)$$

$$537) 2 \frac{4}{5} \left(-10 \frac{5}{12}x + \frac{31}{6} \right) = \frac{3}{4}x + \frac{3}{5} \left(\frac{7}{9}x + \frac{19}{10} \right)$$

$$538) 1 \frac{1}{3} \left(-3 \frac{3}{14}n + 1 \right) = 1 \frac{1}{5} \left(-6n + \frac{5}{13} \right)$$

$$539) \frac{8}{7}b + 1 \frac{1}{4} \left(\frac{3}{7}b - \frac{1}{5} \right) = 2 - \frac{2}{3} \left(5 \frac{5}{14}b + 1 \right)$$

$$540) -\frac{1}{10} \left(-1 \frac{4}{7}x - \frac{8}{13} \right) - \frac{10}{7} \left(-1 \frac{1}{2}x - \frac{2}{3} \right) = \frac{79}{12}x + 1 + 1 \frac{3}{8}$$

$$541) \frac{21}{11}r + \frac{2}{3} \left(-\frac{25}{7}r + 5 \frac{3}{13} \right) = -1 \frac{1}{6} \left(1 \frac{5}{8}r - 5 \frac{5}{6} \right) + \frac{4}{3}r$$

$$542) -1 \frac{4}{11} \left(\frac{4}{7}n + 1 \frac{3}{4} \right) = -1 \frac{1}{8} \left(\frac{1}{3}n + \frac{23}{11} \right)$$

$$543) \frac{7}{8} \left(-\frac{27}{8}a + 1 \right) + 2 \frac{1}{4} \left(4 \frac{1}{2}a - 1 \right) = a - 1 \frac{3}{8} - \frac{1}{2}a + 1$$

$$544) -2 \frac{2}{9} \left(v + \frac{3}{7} \right) + 6 \frac{7}{10} = \frac{1}{13} \left(1 \frac{3}{5}v - 10 \right)$$

$$545) 2 \frac{1}{11} \left(\frac{49}{8}x + \frac{61}{13} \right) + 3 \frac{1}{6} = -2 \frac{3}{8} \left(6 \frac{2}{3}x + 1 \frac{1}{6} \right)$$

$$546) \frac{41}{10}x + \frac{12}{11} \left(-1 \frac{3}{4}x + 2 \frac{1}{6} \right) = \frac{7}{5} \left(\frac{3}{2}x + 1 \right)$$

$$547) 6 \left(-\frac{1}{3}a + 1 \right) + \frac{3}{14} = \frac{4}{5} \left(a + \frac{7}{8} \right) - \frac{1}{2}a$$

$$548) 2 \left(\frac{3}{8}p + 5 \frac{5}{13} \right) + 2 \frac{1}{2} = 3 \frac{4}{5} \left(\frac{17}{3}p + \frac{1}{2} \right)$$

$$549) -\frac{29}{9} \left(\frac{5}{3}x + 1 \right) = 1 \frac{2}{7} - \frac{8}{5} \left(x + \frac{43}{10} \right)$$

$$550) 4 \frac{5}{6} \left(k - \frac{1}{4} \right) + \frac{3}{7} \left(1 \frac{1}{2}k + 2 \right) = 5 \frac{3}{10}k + 1 \frac{4}{13} + 1 \frac{3}{13}k + 1 \frac{10}{13}$$

$$551) -\frac{2}{3} \left(1 \frac{4}{11}n + 1 \right) + \frac{5}{13}n = \frac{4}{5} \left(-1 \frac{3}{4}n + \frac{43}{8} \right)$$

$$552) 3 \frac{2}{3} \left(1 \frac{4}{5}m + 1 \right) = -2 \frac{5}{13} \left(-\frac{21}{11}m - 3 \frac{5}{14} \right) - \frac{3}{2}$$

$$553) \frac{15}{2} \left(x + \frac{5}{8} \right) = -\frac{6}{7} \left(1 \frac{9}{11} x + 1 \frac{10}{13} \right)$$

$$554) r + 1 \frac{1}{2} + \frac{9}{2} r + 11 \frac{4}{11} = \frac{37}{9} \left(5 \frac{3}{4} r + 1 \frac{1}{2} \right) - 3 \frac{7}{9} \left(1 \frac{8}{13} r - 2 \frac{5}{12} \right)$$

$$555) -\frac{4}{5} n + 2 + n + \frac{3}{8} = 7 \frac{5}{6} \left(2 \frac{6}{7} n + 1 \right) + 3 \frac{2}{7} \left(\frac{115}{9} n - \frac{4}{3} \right)$$

$$556) 5 \frac{3}{5} - \frac{25}{9} \left(\frac{35}{6} b + \frac{16}{9} \right) = 3 \frac{7}{9} b + 7 \frac{1}{2} \left(b + \frac{44}{7} \right)$$

$$557) -14 \frac{1}{2} + \frac{7}{10} \left(1 \frac{3}{10} v + \frac{77}{10} \right) = \frac{6}{7} v - 14 \left(v + 2 \frac{1}{8} \right)$$

$$558) 7 \frac{11}{12} - 6 \left(\frac{25}{4} x - 14 \right) = -2 \frac{1}{12} \left(1 \frac{7}{9} x + \frac{23}{6} \right) \quad 559) -11 \left(-\frac{2}{5} n + 1 \right) = -\frac{3}{2} \left(3 \frac{11}{14} n + \frac{15}{2} \right)$$

$$560) -3 \frac{1}{4} \left(3 \frac{5}{7} a + 1 \frac{7}{13} \right) - 3 \frac{8}{11} \left(1 \frac{4}{5} a + 5 \frac{7}{8} \right) = 4 \frac{5}{6} a + \frac{27}{4} a$$

$$561) \frac{17}{11} \left(x + 3 \frac{7}{9} \right) = -1 - 1 \frac{1}{2} \left(x - \frac{15}{4} \right)$$

$$562) -1 \frac{2}{3} \left(3k + 5 \frac{3}{7} \right) = 2 \frac{2}{9} - 3 \frac{1}{5} \left(\frac{9}{13} k + 12 \right)$$

$$563) 11 \frac{2}{5} \left(x + \frac{13}{10} \right) + \frac{3}{11} = -9 \frac{1}{2} x - 1 \frac{3}{4} \left(\frac{9}{7} x + \frac{1}{7} \right)$$

$$564) 3 \frac{2}{9} \left(\frac{37}{14} n + \frac{38}{5} \right) = 6 \frac{3}{4} \left(n + 4 \frac{1}{2} \right)$$

$$565) -1 \frac{1}{5} \left(-2p + 1 \frac{9}{10} \right) = -2 \left(-\frac{7}{8} p + \frac{1}{2} \right)$$

$$566) 2 \frac{7}{11} \left(\frac{21}{4} m + 2 \frac{7}{11} \right) = 1 \frac{4}{5} \left(1 \frac{1}{4} m + 1 \frac{3}{10} \right)$$

$$567) \frac{38}{13} \left(x + 2 \frac{3}{8} \right) + \frac{1}{5} x = -\frac{7}{12} + 4 \frac{1}{2} \left(\frac{1}{4} x + 1 \right)$$

$$568) 7 \frac{5}{12} \left(n - \frac{2}{3} \right) + 4 \frac{5}{11} \left(1 \frac{1}{4} n + 7 \right) = 1 \frac{5}{6} n + \frac{1}{2} n$$

$$569) 6 \frac{3}{8} \left(\frac{47}{11} b - 1 \frac{1}{4} \right) - 1 \frac{5}{6} = \frac{9}{10} \left(\frac{13}{4} b + 5 \frac{3}{7} \right)$$

$$570) \frac{41}{12} \left(r + 5 \frac{3}{7} \right) - \frac{4}{5} r = -1 \frac{3}{13} \left(1 \frac{5}{14} r - \frac{11}{6} \right)$$

$$571) \frac{1}{2} \left(4 \frac{3}{10} x + \frac{11}{12} \right) + \frac{1}{2} = -3 \frac{11}{12} \left(x + 1 \frac{1}{12} \right)$$

$$572) 2 \left(\frac{1}{2} n + 1 \right) = 1 \frac{2}{7} n - \frac{13}{4} \left(1 \frac{2}{9} n - 2 \right)$$

$$573) \frac{4}{5} \left(3 \frac{1}{13} v + 1 \right) = -9 \frac{1}{7} \left(\frac{14}{13} v - 1 \frac{3}{4} \right)$$

$$574) 3 \frac{4}{5} \left(-\frac{2}{3} a + \frac{3}{14} \right) = -3 \frac{1}{6} + 2 \left(-\frac{3}{10} a + \frac{63}{8} \right)$$

$$575) -9 \left(-1 \frac{8}{9} x + 2 \frac{7}{12} \right) = \frac{39}{10} \left(x + 5 \frac{3}{14} \right)$$

$$576) \frac{5}{7} \left(\frac{17}{10} x + 4 \frac{7}{8} \right) - \frac{27}{10} \left(3 \frac{3}{5} x + 4 \frac{11}{12} \right) = 5 \frac{1}{6} x - \frac{1}{7} x$$

$$577) 7 \left(a - 5 \frac{4}{5} \right) - \frac{1}{5} a = -2 \frac{1}{3} \left(-1 \frac{9}{14} a - 1 \frac{5}{13} \right)$$

$$578) \frac{1}{2} \left(x - \frac{28}{9} \right) + \frac{4}{5} \left(x + \frac{1}{2} \right) = -7x - \frac{8}{3} x$$

$$579) -3 \frac{1}{2} \left(p - \frac{1}{9} \right) + 1 = \frac{3}{10} \left(\frac{1}{3} p + 1 \frac{1}{3} \right) + 1 \frac{2}{3}$$

$$580) \frac{17}{8} \left(\frac{13}{14} k - \frac{29}{14} \right) + 3 \frac{3}{13} k = 7 \frac{3}{14} - 1 \frac{3}{14} \left(\frac{20}{7} k - \frac{1}{3} \right)$$

$$581) \frac{12}{7} \left(\frac{31}{6} n + \frac{1}{2} \right) = 1 \frac{12}{13} \left(n + 1 \frac{9}{10} \right)$$

$$582) -1 \frac{3}{14} r + \frac{9}{8} \left(2r + \frac{4}{5} \right) = \frac{10}{13} + 2 \frac{11}{14} \left(2 \frac{7}{12} r + 1 \right)$$

$$583) 7\frac{1}{6}\left(1\frac{8}{9}n+1\right)+1\frac{3}{7}=1\frac{9}{11}\left(6\frac{1}{8}n+6\frac{5}{8}\right) \quad 584) \frac{1}{7}\left(\frac{3}{5}x-\frac{7}{8}\right)-3\frac{1}{10}=-\left(\frac{13}{6}x+1\right)-4x$$

$$585) \frac{13}{2}m+4\frac{11}{14}+\frac{6}{13}=3\frac{1}{6}\left(-2\frac{2}{3}m-1\frac{1}{3}\right)+\frac{7}{10}\left(3\frac{9}{10}m-1\frac{6}{13}\right)$$

$$586) -3\frac{2}{7}\left(b+2\frac{1}{3}\right)+\frac{5}{8}=1\frac{1}{6}\left(b+\frac{1}{13}\right) \quad 587) -\frac{3}{4}x-\frac{9}{5}\left(5x+4\frac{1}{6}\right)=-\left(x-1\frac{1}{4}\right)$$

$$588) -7\left(n+\frac{5}{4}\right)=\frac{1}{2}\left(-1\frac{1}{2}n+2\frac{4}{11}\right)-3$$

$$589) 6\frac{4}{9}\left(7\frac{1}{6}v-\frac{16}{9}\right)+6\frac{5}{6}\left(\frac{1}{12}v-\frac{3}{2}\right)=\frac{3}{2}v+1\frac{1}{2}-1\frac{1}{3}v$$

$$590) \frac{2}{5}\left(-\frac{1}{2}k-\frac{11}{4}\right)=-2\frac{13}{14}\left(1\frac{1}{3}k+1\right) \quad 591) 2\frac{3}{4}\left(\frac{1}{3}a+\frac{7}{11}\right)+\frac{2}{3}=\frac{25}{6}\left(2\frac{5}{8}a+\frac{9}{4}\right)$$

$$592) \frac{19}{9}\left(-4\frac{7}{13}x+\frac{10}{11}\right)=\frac{5}{6}\left(x+\frac{12}{13}\right) \quad 593) 1\frac{6}{11}\left(\frac{6}{7}x+\frac{39}{11}\right)=\frac{1}{4}\left(-3\frac{5}{6}x+\frac{3}{2}\right)$$

$$594) \frac{49}{9}\left(3\frac{1}{3}p+1\right)=12+5\frac{9}{10}\left(\frac{1}{8}p+1\right) \quad 595) 6\frac{2}{7}-\frac{13}{14}\left(m-1\frac{5}{9}\right)=\frac{36}{7}+3\frac{2}{3}\left(m+3\frac{1}{9}\right)$$

$$596) -\frac{4}{11}\left(\frac{1}{2}x+\frac{16}{5}\right)=1\frac{2}{3}\left(x+2\frac{1}{6}\right)$$

$$597) n+6\frac{1}{2}+\frac{29}{4}n+\frac{2}{3}=-1\frac{9}{10}\left(\frac{1}{8}n-2\frac{11}{13}\right)-2\left(\frac{81}{11}n-2\right)$$

$$598) -\frac{1}{12}\left(-2n+5\frac{7}{9}\right)+\frac{63}{8}n=1\frac{8}{9}\left(-5n+\frac{17}{3}\right)+1\frac{2}{7}n$$

$$599) -\frac{8}{3}b+\frac{5}{12}\left(\frac{5}{6}b+1\right)=4\frac{2}{5}+1\frac{5}{9}\left(\frac{3}{2}b+2\right) \quad 600) -1\frac{3}{7}\left(\frac{97}{14}r-\frac{1}{2}\right)+\frac{1}{8}r=\frac{1}{4}\left(r-1\frac{1}{6}\right)+\frac{3}{8}r$$

$$601) -\frac{7}{6}+15\frac{8}{35}\left(\frac{15}{23}m+\frac{8}{19}\right)=\frac{23}{22}+\frac{25}{36}\left(-\frac{6}{7}m-24\right)$$

$$602) \frac{7}{3}\left(1\frac{1}{35}x-2\right)+19\frac{29}{31}=1\frac{19}{21}\left(\frac{62}{21}x-\frac{2}{3}\right) \quad 603) -\frac{2}{7}\left(\frac{45}{19}n+17\frac{1}{8}\right)=14\frac{7}{19}\left(1\frac{9}{11}n+\frac{119}{9}\right)$$

$$604) \frac{641}{37}n+14\frac{17}{19}n=-\frac{53}{19}\left(n-\frac{37}{24}\right)+\frac{2}{7}\left(\frac{5}{9}n+\frac{164}{31}\right)$$

$$605) -\frac{3}{23}\left(\frac{8}{27}r+1\frac{1}{3}\right)-\frac{22}{25}r=9\frac{27}{37}+9\frac{6}{25}\left(1\frac{1}{5}r-2\right)$$

$$606) -\frac{13}{27}-1\frac{11}{24}\left(-\frac{69}{35}b+\frac{184}{17}\right)=15\frac{1}{27}\left(15\frac{5}{24}b+34\right)$$

$$607) 17\frac{6}{7}\left(\frac{555}{31}v+8\frac{1}{6}\right)=25\left(1\frac{2}{17}v-\frac{19}{20}\right) \quad 608) 20\frac{23}{29}\left(x+10\frac{4}{9}\right)=\frac{1}{4}\left(2x+\frac{82}{31}\right)+2x$$

$$609) 1\frac{2}{9}\left(n-\frac{5}{13}\right)-\frac{18}{23}n=\frac{4}{5}\left(1\frac{5}{6}n+15\frac{4}{5}\right)+12\frac{4}{5}n$$

$$610) \frac{386}{27}\left(a+\frac{20}{27}\right)=24a-\frac{2}{19}\left(a-\frac{11}{32}\right) \quad 611) -\frac{17}{18}\left(10\frac{26}{33}k+9\frac{31}{35}\right)=\frac{235}{26}\left(-1\frac{16}{17}k-\frac{5}{14}\right)$$

$$612) -38\left(-2\frac{8}{27}p+6\frac{5}{9}\right)=-\frac{1}{2}p+17\frac{5}{19}\left(\frac{125}{38}p+1\right)$$

$$613) \quad 1\frac{12}{25}\left(\frac{23}{29}m - 1\frac{3}{16}\right) = -\frac{34}{35}\left(\frac{473}{37}m - 1\right)$$

$$614) \quad 38\left(16\frac{3}{14}x + 15\frac{25}{26}\right) + 1\frac{13}{14}x = -1\frac{2}{3} + 20\frac{19}{36}\left(x + \frac{295}{16}\right)$$

$$615) \quad 1\frac{1}{2}\left(-\frac{9}{10}r + 1\frac{34}{35}\right) - \frac{7}{10}\left(9\frac{9}{22}r + 6\frac{5}{8}\right) = 30r + 2\frac{4}{5}r$$

$$616) \quad 1\frac{1}{2}\left(18\frac{21}{40}n + 5\frac{11}{13}\right) + 3\frac{4}{19}\left(-\frac{1}{9}n + 1\frac{1}{9}\right) = \frac{7}{16}n + \frac{545}{39} - 1\frac{4}{23}n - 1\frac{29}{31}$$

$$617) \quad \frac{475}{24}\left(x + \frac{491}{39}\right) = \frac{30}{29}\left(1\frac{13}{14}x - \frac{13}{18}\right) \quad 618) \quad 18\frac{1}{30}n - \frac{2}{5}\left(1\frac{2}{3}n + \frac{1}{3}\right) = -1\frac{1}{3}\left(\frac{33}{34}n + \frac{3}{14}\right)$$

$$619) \quad -\frac{5}{13}r - \frac{31}{17}\left(1\frac{8}{11}r + 14\frac{7}{16}\right) = -\frac{38}{17}\left(15\frac{19}{26}r - \frac{1}{5}\right)$$

$$620) \quad -\frac{7}{38}\left(2\frac{17}{18}x - \frac{2}{3}\right) + \frac{11}{19}\left(\frac{5}{11}x + \frac{13}{15}\right) = -\frac{34}{37}x - \frac{2}{7}x$$

$$621) \quad -1\frac{7}{19}\left(n - \frac{1}{20}\right) - 2\frac{16}{33} = -20\left(\frac{31}{37}n + 1\frac{1}{20}\right)$$

$$622) \quad 8\frac{33}{34} - \left(1\frac{32}{35}b + 6\frac{8}{9}\right) = 9\frac{9}{17}\left(12\frac{24}{31}b + \frac{9}{2}\right) - 1\frac{13}{20}b$$

$$623) \quad -\frac{5}{8}\left(1\frac{9}{20}x + \frac{10}{7}\right) - 18x = -\frac{1}{2}\left(x + \frac{37}{2}\right)$$

$$624) \quad -20 + 9\frac{2}{5}\left(x + 5\frac{23}{26}\right) = -\frac{5}{21} + \frac{2}{15}\left(\frac{47}{10}x - 1\frac{5}{18}\right)$$

$$625) \quad -2\frac{5}{13} - 3\frac{28}{29}\left(-\frac{1}{4}v - 1\frac{5}{6}\right) = -\frac{14}{13}v + 1\frac{1}{5}\left(\frac{23}{16}v + \frac{1}{7}\right)$$

$$626) \quad a - \frac{9}{5} + 10\frac{4}{5}a + 1\frac{25}{31} = 31\left(\frac{1}{16}a - \frac{3}{2}\right) + 1\frac{3}{5}\left(\frac{1}{6}a + 7\frac{5}{12}\right)$$

$$627) \quad 9\frac{7}{13}\left(\frac{19}{24}n + 1\right) + 1\frac{7}{38} = -\left(37n + 1\frac{1}{8}\right)$$

$$628) \quad \frac{269}{33}\left(p - \frac{11}{30}\right) = 14\frac{5}{12}\left(\frac{261}{13}p + 9\frac{7}{33}\right) + 8\frac{8}{17}p$$

$$629) \quad -\frac{129}{40}k - \frac{2}{11}k = -\frac{3}{2}\left(k + \frac{646}{35}\right) + 1\frac{19}{31}\left(\frac{2}{3}k - \frac{8}{11}\right)$$

$$630) \quad -\frac{17}{12}\left(x - \frac{31}{36}\right) + \frac{393}{22} = 1\frac{2}{5} - \frac{6}{7}\left(x + \frac{3}{4}\right)$$

$$631) \quad \frac{488}{27} - 1\frac{11}{15}\left(18\frac{7}{12}n + \frac{11}{23}\right) = 11\frac{2}{3}\left(n + 1\frac{5}{13}\right)$$

$$632) \quad \frac{69}{8} - \frac{3}{4}\left(33m + 12\frac{2}{15}\right) = 1\frac{2}{9}\left(\frac{305}{18}m + 20\frac{18}{25}\right)$$

$$633) \quad \frac{31}{34}r - 1\frac{4}{7}r = 19\frac{9}{23}\left(1\frac{3}{13}r - \frac{817}{26}\right) + \frac{1}{3}\left(r + 15\frac{8}{31}\right)$$

$$634) \quad -\frac{1}{14}x - 1\frac{17}{18}\left(6\frac{28}{39}x + 9\frac{7}{10}\right) = 38 + 17\frac{13}{20}\left(\frac{3}{4}x - 2\right)$$

$$635) -\frac{2}{13}n - \frac{1}{23} + 16\frac{21}{32} = 4\frac{13}{34}\left(-19\frac{2}{7}n + \frac{373}{34}\right) + 11\frac{11}{18}\left(9\frac{5}{36}n + 14\frac{11}{34}\right)$$

$$636) -4\frac{7}{27}\left(v + 11\frac{17}{36}\right) = \frac{14}{15}v + \frac{3}{2}\left(8\frac{5}{33}v + \frac{735}{38}\right)$$

$$637) \frac{14}{15}\left(2b + 1\frac{1}{3}\right) + \frac{12}{23} = \frac{31}{3} - \frac{7}{20}\left(3\frac{1}{2}b + 6\frac{1}{12}\right)$$

$$638) 5\frac{4}{7}\left(-\frac{21}{20}x + \frac{8}{9}\right) + \frac{377}{18} = \frac{19}{30}\left(x + \frac{65}{4}\right) \quad 639) 1\frac{6}{19}\left(\frac{343}{18}n + 7\frac{5}{23}\right) = \frac{47}{15}\left(\frac{123}{38}n + 19\frac{17}{31}\right)$$

$$640) -3\frac{21}{40}a + 1 + \frac{644}{31}a = \frac{307}{16}\left(a + \frac{77}{24}\right) + 23\left(a + 1\frac{2}{23}\right)$$

$$641) \frac{299}{16}\left(k + \frac{9}{37}\right) + 4\frac{3}{10} = \frac{18}{37}\left(k - 1\frac{11}{40}\right) - 2k$$

$$642) -\frac{7}{16}\left(18\frac{17}{24}p + 1\right) + \frac{31}{30}p = 12\frac{27}{40}\left(\frac{9}{23}p + \frac{134}{9}\right) + 2$$

$$643) -\frac{1}{2}\left(-8n - \frac{3}{14}\right) = \frac{75}{8}\left(n - 1\frac{21}{25}\right)$$

$$644) -\frac{2}{3}x + 18\frac{9}{28}\left(x + \frac{537}{31}\right) = -1\frac{2}{25}\left(-33x + \frac{27}{22}\right)$$

$$645) \frac{4}{29}\left(11\frac{1}{4}m - \frac{13}{37}\right) + \frac{1}{3} = 15m - 1\frac{13}{21}\left(-28m + 14\frac{1}{6}\right)$$

$$646) \frac{15}{16}r + 14\left(r - \frac{28}{39}\right) = -\frac{17}{19}\left(r + 7\frac{7}{11}\right) + \frac{485}{27}$$

$$647) \frac{219}{25} - 40\left(1\frac{3}{5}x - 1\right) = 2\frac{1}{3}x - \frac{3}{2}\left(1\frac{1}{6}x + 24\frac{7}{10}\right)$$

$$648) -2\frac{19}{26}\left(\frac{1}{7}b - \frac{8}{9}\right) = 1\frac{1}{4}\left(6\frac{1}{16}b + 1\right)$$

$$649) 20\frac{3}{22}\left(-34n + 1\frac{17}{19}\right) + 14\frac{11}{16}\left(n + 4\frac{4}{13}\right) = -1\frac{1}{3}n - \frac{26}{25} + 6\frac{1}{24}$$

$$650) -1\frac{7}{12}\left(-1\frac{10}{17}x + 1\right) = -1\frac{8}{15}\left(1\frac{1}{6}x + 11\frac{19}{29}\right)$$

$$651) -1\frac{27}{31}v + 5\frac{7}{18}\left(\frac{187}{12}v + 26\frac{37}{38}\right) = 6\frac{5}{39}\left(5\frac{13}{14}v + 1\right)$$

$$652) 1\frac{4}{39}\left(\frac{332}{35}n + 1\frac{11}{36}\right) - \frac{31}{39}n = 1\frac{25}{36} - 22\left(\frac{132}{23}n - 1\frac{20}{31}\right)$$

$$653) 18\frac{1}{2} + 9\frac{2}{21}\left(\frac{250}{21}v + \frac{202}{15}\right) = 10\frac{5}{37}\left(v - 1\frac{2}{17}\right)$$

$$654) 8\frac{3}{5}a - \frac{5}{6}\left(\frac{63}{34}a + 3\frac{28}{37}\right) = 1\frac{2}{3}a + 9\frac{5}{6}\left(a + \frac{42}{11}\right)$$

$$655) 1\frac{1}{2}x + 4\frac{1}{4}x = 18\frac{8}{19}\left(\frac{3}{10}x + \frac{1}{2}\right) + 18\frac{16}{25}\left(x + 1\frac{25}{36}\right)$$

$$656) 1\frac{29}{30}k - 6\left(3\frac{1}{21}k + 1\right) = 13\frac{17}{19}\left(k + 1\frac{1}{2}\right)$$

$$657) \quad 13 \frac{3}{7} \left(\frac{9}{19}x - \frac{91}{34} \right) + \frac{1}{8}x = \frac{3}{5} \left(\frac{4}{19}x + 15 \frac{13}{24} \right) + \frac{1}{2}x$$

$$658) \quad -\frac{16}{17} \left(p + \frac{2}{35} \right) = 7 \frac{9}{29} + \frac{177}{19} \left(p + \frac{119}{6} \right)$$

$$659) \quad 2 \frac{7}{24} \left(n + 8 \frac{5}{33} \right) + 1 \frac{17}{39} = -\frac{13}{14} \left(\frac{13}{14}n - \frac{1}{4} \right) + \frac{4}{37}n$$

$$660) \quad \frac{9}{22} \left(8 \frac{2}{35}n + 1 \frac{11}{23} \right) = \frac{203}{12} \left(-\frac{6}{17}n - \frac{31}{22} \right)$$

$$661) \quad \frac{216}{25}m + 1 + \frac{56}{33}m = 13 \frac{29}{30} \left(17 \frac{13}{32}m + \frac{5}{6} \right) + \frac{111}{8} \left(m + 15 \frac{15}{28} \right)$$

$$662) \quad -29 \left(x + 19 \frac{13}{15} \right) + 3 \frac{21}{26} \left(-1 \frac{13}{32}x + 15 \frac{15}{16} \right) = 18 \frac{13}{14}x + \frac{63}{34} + \frac{3}{13}x - \frac{23}{18}$$

$$663) \quad \frac{287}{33}r + \frac{165}{28} \left(13 \frac{37}{39}r - 2 \right) = \frac{23}{24} \left(r + \frac{11}{21} \right)$$

$$664) \quad 13 \frac{4}{17} \left(8 \frac{1}{6}x + \frac{16}{33} \right) + \frac{116}{11} = -\frac{23}{20} \left(-\frac{13}{22}x + \frac{7}{19} \right) + 20 \frac{11}{20}$$

$$665) \quad -\frac{7}{9} \left(\frac{8}{27}b + 1 \right) = -\frac{32}{17} + 11 \frac{17}{28} \left(9 \frac{7}{9}b + \frac{29}{31} \right) \quad 666) \quad 8 \frac{1}{38} \left(2n + \frac{184}{21} \right) = \frac{4}{39} \left(\frac{26}{15}n + \frac{1}{3} \right) + \frac{344}{29}$$

$$667) \quad -1 \frac{13}{16}v + 15 \frac{14}{25} + \frac{3}{5}v + \frac{43}{24} = 1 \frac{2}{31} \left(28v + 16 \frac{1}{15} \right) + \frac{7}{9} \left(16 \frac{9}{13}v + 1 \right)$$

$$668) \quad \frac{93}{35} \left(x + \frac{17}{16} \right) - 2 \frac{24}{25}x = \frac{105}{22} \left(\frac{1}{5}x - 1 \frac{1}{7} \right) + 1 \frac{2}{21}x$$

$$669) \quad -\frac{10}{11} - \frac{13}{12} \left(n - \frac{13}{18} \right) = \frac{17}{27} \left(n + \frac{281}{24} \right) + 7 \frac{1}{40}n \quad 670) \quad \frac{335}{16}k + 17 \frac{5}{21} \left(\frac{25}{26}k + 7 \frac{7}{30} \right) = 21 \left(k + 16 \frac{5}{6} \right)$$

$$671) \quad -\frac{29}{8} \left(a + 8 \frac{5}{31} \right) = \frac{419}{32} \left(\frac{12}{35}a + 14 \frac{2}{11} \right) \quad 672) \quad 14 \frac{14}{27} \left(2 \frac{23}{35}x + \frac{22}{27} \right) = -\frac{17}{23} \left(\frac{199}{21}x + \frac{733}{35} \right)$$

$$673) \quad 7 \frac{2}{5}p + \frac{23}{13}p = -7 \left(-\frac{29}{37}p + \frac{17}{20} \right) + \frac{2}{11} \left(p + \frac{97}{13} \right)$$

$$674) \quad \frac{3}{2} \left(\frac{8}{11}n + 1 \frac{9}{13} \right) - \frac{17}{25} \left(\frac{8}{9}n + 7 \frac{3}{8} \right) = n + \frac{2}{5} - \frac{23}{26}$$

$$675) \quad \frac{5}{2} + 8 \frac{13}{22} \left(1 \frac{3}{10}m + \frac{443}{31} \right) = 14 \frac{1}{6} + 18 \frac{1}{16} \left(1 \frac{10}{33}m + 1 \frac{12}{23} \right)$$

$$676) \quad 16 \frac{3}{10} \left(-\frac{13}{16}r + 1 \frac{1}{9} \right) = 23 \left(\frac{10}{21}r - \frac{43}{11} \right)$$

$$677) \quad \frac{1}{2} + 39 \frac{19}{21} \left(20 \frac{8}{35}x - \frac{10}{7} \right) = 20 \frac{23}{24} \left(4 \frac{27}{31}x - 27 \frac{6}{23} \right)$$

$$678) \quad -\frac{17}{9}b - \frac{34}{21} \left(b + 2 \frac{1}{2} \right) = 6 \frac{13}{20} \left(11 \frac{21}{38}b + 1 \frac{7}{39} \right)$$

$$679) \quad -\frac{29}{20} \left(3 \frac{13}{20}n + \frac{49}{6} \right) = 7 \frac{7}{32} - 2 \frac{10}{13} \left(15 \frac{13}{37}n - \frac{43}{16} \right)$$

$$680) \quad 7 \frac{3}{37} \left(-16v + 6 \frac{25}{26} \right) = -25 \left(\frac{33}{20}v - \frac{19}{20} \right) - \frac{13}{16}v$$

$$681) \ 5\frac{5}{6}\left(x - 1\frac{3}{11}\right) - \frac{5}{3}\left(20\frac{16}{39}x + \frac{7}{11}\right) = -1\frac{17}{32}x + 11\frac{1}{19}x$$

$$682) \ 26\left(a + \frac{115}{16}\right) = \frac{16}{17}\left(\frac{14}{3}a - 1\frac{3}{5}\right)$$

$$683) \ 3\frac{23}{36}\left(n + 16\frac{1}{2}\right) = 5\frac{19}{33} - 3\frac{1}{6}\left(\frac{2}{3}n + \frac{241}{18}\right)$$

$$684) \ \frac{197}{10}v + 13\frac{1}{2}\left(28\frac{2}{23}v + \frac{7}{30}\right) = \frac{56}{3}v - \frac{1}{3}\left(\frac{11}{23}v + 1\frac{26}{37}\right)$$

$$685) \ \frac{375}{38}\left(\frac{37}{8}x + 1\right) = \frac{43}{5} + 37\left(9\frac{35}{38}x + 15\frac{5}{23}\right)$$

$$686) \ 17\frac{32}{39}\left(k + 18\frac{6}{13}\right) = \frac{1}{4}\left(\frac{543}{31}k + \frac{4}{13}\right)$$

$$687) \ \frac{35}{33}\left(n - 1\frac{11}{12}\right) = -\frac{7}{4}\left(1\frac{26}{33}n + \frac{14}{23}\right)$$

$$688) \ \frac{24}{37}\left(17\frac{17}{28}x + 1\right) = -34\left(x + \frac{4}{5}\right) - \frac{35}{19}x$$

$$689) \ -\frac{19}{12}\left(m + 9\frac{22}{31}\right) = -\frac{7}{11}\left(\frac{2}{3}m + \frac{27}{32}\right)$$

$$690) \ 18\frac{1}{30}x + \frac{26}{5}\left(x + \frac{17}{9}\right) = \frac{1}{28}\left(\frac{4}{7}x + 1\right)$$

$$691) \ -1\frac{9}{17}p + 9\frac{1}{6}p = 3\frac{3}{10}\left(\frac{75}{19}p + 12\frac{3}{8}\right) - 29\frac{11}{28}\left(11\frac{3}{7}p + \frac{5}{21}\right)$$

$$692) \ \frac{527}{32}\left(\frac{340}{37}n + 1\right) = -1\frac{3}{11}n + 7\frac{2}{17}\left(\frac{8}{23}n - \frac{68}{37}\right)$$

$$693) \ -\frac{24}{11}r + 1\frac{21}{31}\left(11\frac{1}{35}r + 1\right) = 13\frac{12}{25}\left(29r - 1\frac{20}{27}\right)$$

$$694) \ \frac{649}{32}x - \frac{5}{23}x = -\frac{16}{29}\left(-\frac{16}{9}x + 1\right) - \frac{2}{3}\left(x + \frac{257}{18}\right)$$

$$695) \ 1\frac{12}{13}\left(\frac{275}{39}x - 1\frac{11}{31}\right) = \frac{95}{6}\left(x + 17\frac{13}{15}\right) \quad 696) \ -1\frac{16}{27}\left(n + 7\frac{1}{2}\right) = 1\frac{1}{9} - 3\frac{1}{13}\left(-\frac{19}{26}n + 7\frac{13}{16}\right)$$

$$697) \ 2\frac{6}{17}\left(b - \frac{11}{7}\right) - 28\left(-\frac{1}{3}b - \frac{1}{13}\right) = -\frac{5}{12}b - 1\frac{5}{36}b$$

$$698) \ \frac{1}{18}\left(18\frac{7}{23}v + 1\frac{5}{7}\right) + \frac{14}{23}v = \frac{10}{33}\left(6\frac{5}{12}v + \frac{112}{9}\right)$$

$$699) \ -1\frac{4}{7}\left(x + 13\frac{11}{30}\right) = -39x - \frac{1}{2}\left(7\frac{21}{40}x + 1\right)$$

$$700) \ -\frac{3}{8} - \frac{8}{29}\left(-\frac{31}{18}a - \frac{1}{2}\right) = -\frac{22}{39}\left(1\frac{8}{9}a + 17\frac{8}{27}\right) - \frac{27}{31}$$

Multi-step equations - fractions**Solve each equation.**

1) $-1\frac{5}{6}b + 3\frac{5}{6}b = \frac{1}{6} + \frac{11}{6}b$ $\{1\}$

3) $1\frac{29}{45} + \frac{2}{5}x = -1\frac{1}{2}x + 1\frac{1}{3} + 2\frac{5}{6}x$ $\{\frac{1}{3}\}$

5) $\frac{7}{2}x + 1\frac{5}{6} = -\frac{15}{4} - \frac{7}{6}x + 1 + 3x$ $\{-2\frac{3}{4}\}$

7) $-\frac{367}{40} + \frac{3}{4}a + 2a = -3\frac{1}{2}a + \frac{1}{5}$ $\{1\frac{1}{2}\}$

9) $\frac{19}{6}x - \frac{1}{2} = \frac{13}{18} + x - 1\frac{2}{3} - 1$ $\{-\frac{2}{3}\}$

11) $-\frac{3}{4}n + \frac{3}{2} + 2n = -\frac{7}{2} - 3\frac{3}{4}n$ $\{-1\}$

13) $2\frac{1}{3}p + 10\frac{2}{3} = \frac{1}{3}p + 3\frac{1}{3} + 2\frac{1}{3}$ $\{-2\frac{1}{2}\}$

15) $2\frac{1}{6}n + \frac{245}{24} = -\frac{7}{4}n + n$ $\{-3\frac{1}{2}\}$

17) $-6\frac{17}{48} - \frac{5}{4}r + 3\frac{1}{2} + 1\frac{5}{6} = -r - 1\frac{1}{3}$ $\{1\frac{1}{4}\}$

19) $-1\frac{2}{3}x - \frac{4}{5} + 1\frac{3}{4} = -3\frac{7}{12} + \frac{3}{5}x$ $\{2\}$

21) $-1\frac{1}{4}v - \frac{31}{6} = \frac{5}{3}v - \frac{1}{2}$ $\{-1\frac{3}{5}\}$

23) $1\frac{1}{3}x + 2\frac{1}{2}x - 5\frac{5}{6} = -3\frac{2}{3}x + \frac{5}{6} + 2\frac{1}{3}$ $\{1\frac{1}{5}\}$

25) $\frac{116}{15} - 3\frac{2}{5}p = p + 4\frac{4}{5}$ $\{\frac{2}{3}\}$

27) $x + \frac{1}{4}x = -\frac{403}{60} + 3\frac{5}{6}x$ $\{2\frac{3}{5}\}$

29) $4\frac{3}{5}n - \frac{2}{3} = -6\frac{17}{20} + 2\frac{5}{6}n$ $\{-3\frac{1}{2}\}$

31) $-\frac{3}{5}r + \frac{3}{5} - 3\frac{3}{4} = -2r - \frac{35}{12}$ $\{\frac{1}{6}\}$

33) $-3b - 1\frac{1}{2} = -12\frac{1}{3} + 1\frac{1}{3}b$ $\{2\frac{1}{2}\}$

35) $3\frac{1}{5}v - 1\frac{4}{5} = \frac{14}{5}v + \frac{1}{5} + \frac{2}{3}$ $\{6\frac{2}{3}\}$

37) $6\frac{13}{30} - \frac{3}{4}k = -3\frac{5}{6}k - 2\frac{1}{5}$ $\{-2\frac{4}{5}\}$

2) $\frac{113}{20} - 1\frac{1}{4}v = v + \frac{8}{5}$ $\{1\frac{4}{5}\}$

4) $-\frac{7}{3}n + 1\frac{1}{6}n - 2\frac{7}{18} = \frac{7}{4}n + 1\frac{1}{2}$ $\{-1\frac{1}{3}\}$

6) $\frac{4}{5}n + 6 = -n - 5\frac{2}{5}$ $\{-6\frac{1}{3}\}$

8) $6\frac{9}{10} + \frac{1}{4}k = 1\frac{2}{5}k - \frac{1}{4} + \frac{8}{5}k$ $\{2\frac{3}{5}\}$

10) $2\frac{5}{6}x - 1\frac{29}{36} = \frac{11}{3}x + 1\frac{1}{4}$ $\{-3\frac{2}{3}\}$

12) $-8\frac{23}{48} - 3\frac{2}{3}m = 1\frac{3}{4}m + 1$ $\{-1\frac{3}{4}\}$

14) $x + \frac{11}{4} - 3x - 1\frac{1}{6} = -1\frac{1}{2}x + 1 + \frac{1}{3}$ $\{\frac{1}{2}\}$

16) $\frac{2}{5}m - 2\frac{7}{30} = -2\frac{1}{6}m + \frac{1}{3}m$ $\{1\}$

18) $1\frac{8}{9} - \frac{1}{2}n = \frac{1}{6}n + 1$ $\{1\frac{1}{3}\}$

20) $b + \frac{2}{3} - \frac{3}{5}b + \frac{13}{30} = -\frac{1}{5}b + 5b$ $\{\frac{1}{4}\}$

22) $-\frac{3}{2}x - 1\frac{1}{4} = -2\frac{2}{5}x + 1\frac{9}{10}$ $\{3\frac{1}{2}\}$

24) $a - 1\frac{1}{6} - 2\frac{5}{6} = -3\frac{5}{6} + \frac{2}{3}a$ $\{\frac{1}{2}\}$

26) $\frac{7}{2}k + 1\frac{5}{6} = -7\frac{23}{30} - \frac{23}{6}k - \frac{2}{3}k$ $\{-1\frac{1}{5}\}$

28) $1\frac{3}{4}m + \frac{2}{3} = \frac{31}{24} + \frac{1}{2}m$ $\{\frac{1}{2}\}$

30) $x + \frac{1}{4} = 12\frac{7}{18} - 3\frac{3}{4}x + 2\frac{5}{6}x$ $\{6\frac{1}{3}\}$

32) $-\frac{1}{12} + \frac{3}{2}n = n + 1\frac{3}{4}$ $\{3\frac{2}{3}\}$

34) $-4 + 3\frac{1}{3}x = 1\frac{1}{3}x + 4x$ $\{-2\}$

36) $1\frac{1}{5} + \frac{4}{5}n = 1\frac{2}{5}n + \frac{2}{5}$ $\{1\frac{1}{3}\}$

38) $11\frac{31}{48} + \frac{4}{3}a = \frac{2}{3}a + \frac{17}{4}a$ $\{3\frac{1}{4}\}$

$$39) -x + \frac{5}{3} = \frac{14}{15} - 1\frac{2}{5}x \quad \left\{ -1\frac{5}{6} \right\}$$

$$41) -2\frac{11}{18} + 1\frac{1}{3}n = \frac{2}{5}n + \frac{1}{2} \quad \left\{ 3\frac{1}{3} \right\}$$

$$43) 10\frac{53}{80} - 3\frac{1}{4}p = \frac{5}{2}p + \frac{3}{5} \quad \left\{ 1\frac{3}{4} \right\}$$

$$45) -\frac{9}{2} - 1\frac{1}{6}n = n + \frac{1}{2} + \frac{17}{6}n \quad \left\{ -1 \right\}$$

$$47) 1\frac{11}{30} - 1\frac{1}{3}r + 1\frac{1}{2}r = 1\frac{1}{2}r + 1\frac{2}{5}r \quad \left\{ \frac{1}{2} \right\}$$

$$49) 3v + 1\frac{1}{4} = 1\frac{33}{100} + 3\frac{1}{5}v \quad \left\{ -\frac{2}{5} \right\}$$

$$51) -7\frac{1}{3} + \frac{1}{3}b = -\frac{18}{5}b - 2 + \frac{9}{5}b \quad \left\{ 2\frac{1}{2} \right\}$$

$$53) \frac{1}{3}a - 1 = 1\frac{5}{6}a + \frac{1}{2}a \quad \left\{ -\frac{1}{2} \right\}$$

$$55) 2k - \frac{17}{5} = \frac{8}{5}k - 3\frac{2}{3} \quad \left\{ -\frac{2}{3} \right\}$$

$$57) \frac{9}{2} - 1\frac{2}{3}x = -3\frac{1}{2}x - 1\frac{1}{6}x \quad \left\{ -1\frac{1}{2} \right\}$$

$$59) -\frac{4}{3}n - 6 = \frac{19}{6}n - 3\frac{3}{4} \quad \left\{ -\frac{1}{2} \right\}$$

$$61) x + 1\frac{3}{4} + 2\frac{1}{4}x = 4\frac{7}{12} + x + 1\frac{1}{6} + 2 \quad \left\{ 2\frac{2}{3} \right\}$$

$$63) -1\frac{1}{5}n + 1 - \frac{3}{4} = 1\frac{1}{5}n + \frac{21}{20} \quad \left\{ -\frac{1}{3} \right\}$$

$$65) 4x - 2\frac{1}{2} = -11\frac{1}{4} - x \quad \left\{ -1\frac{3}{4} \right\}$$

$$67) \frac{5}{6}x - \frac{5}{6}x = 5\frac{3}{4} - 1\frac{1}{2}x \quad \left\{ 3\frac{5}{6} \right\}$$

$$69) -x + \frac{1}{2} = 1\frac{1}{4} - 4x \quad \left\{ \frac{1}{4} \right\}$$

$$71) \frac{1}{2}m + 1 = 5 - 1\frac{1}{2}m \quad \left\{ 2 \right\}$$

$$73) \frac{3}{5}p + 1\frac{1}{4} = \frac{79}{20} - 1\frac{1}{5}p \quad \left\{ 1\frac{1}{2} \right\}$$

$$75) -1\frac{1}{2}b + 2\frac{1}{5}b = 1\frac{1}{50} - b \quad \left\{ \frac{3}{5} \right\}$$

$$77) r + 3\frac{5}{6} + 2r = 7\frac{11}{12} - 5\frac{1}{6}r \quad \left\{ \frac{1}{2} \right\}$$

$$79) \frac{1}{2}n - \frac{1}{2} = -5\frac{1}{2} - \frac{1}{2}n \quad \left\{ -5 \right\}$$

$$40) -\frac{17}{18} + 3\frac{2}{3}x - \frac{19}{6} + 1\frac{1}{2} = -\frac{2}{3}x + 1 \quad \left\{ \frac{5}{6} \right\}$$

$$42) 1\frac{1}{2}m - 2\frac{3}{4}m = -\frac{19}{24} + \frac{1}{3}m \quad \left\{ \frac{1}{2} \right\}$$

$$44) -\frac{1}{180} - \frac{1}{4}x = -\frac{2}{3}x + 1\frac{4}{5} \quad \left\{ 4\frac{1}{3} \right\}$$

$$46) 3 + 3\frac{1}{3}m = 6m - \frac{11}{3} \quad \left\{ 2\frac{1}{2} \right\}$$

$$48) 6\frac{1}{2} + 1\frac{1}{6}x = 1\frac{5}{6}x + 3\frac{1}{6} \quad \left\{ 5 \right\}$$

$$50) 1\frac{17}{20} - \frac{1}{2}x = x - 1\frac{3}{4} + 3\frac{3}{5} \quad \left\{ 0 \right\}$$

$$52) \frac{5}{6}n + 3n = -\frac{20}{3} + 1\frac{1}{3}n \quad \left\{ -2\frac{2}{3} \right\}$$

$$54) 2x - 3\frac{2}{3} = 1\frac{1}{3}x - 4\frac{3}{5} \quad \left\{ -1\frac{2}{5} \right\}$$

$$56) -\frac{5}{6}p + \frac{7}{6} = 1 + 2p + 1\frac{1}{2} - \frac{3}{2}p \quad \left\{ -1 \right\}$$

$$58) \frac{18}{25} - \frac{1}{5}m = -1\frac{2}{5}m + \frac{3}{4}m \quad \left\{ -1\frac{3}{5} \right\}$$

$$60) 3\frac{1}{3}r + \frac{64}{9} = 1\frac{1}{2}r + 1 \quad \left\{ -3\frac{1}{3} \right\}$$

$$62) 9\frac{29}{36} + 3\frac{4}{5}b + b = -\frac{1}{3}b + \frac{5}{4} \quad \left\{ -1\frac{2}{3} \right\}$$

$$64) -\frac{11}{6}v - 2\frac{2}{3}v = -12\frac{17}{30} + \frac{1}{3}v \quad \left\{ 2\frac{3}{5} \right\}$$

$$66) -3\frac{1}{4}n - 8\frac{31}{48} = 2\frac{5}{6}n + 2 \quad \left\{ -1\frac{3}{4} \right\}$$

$$68) 3\frac{4}{5}a + \frac{1}{4} = 2\frac{7}{10} - \frac{1}{3}a + 2\frac{1}{2}a \quad \left\{ 1\frac{1}{2} \right\}$$

$$70) \frac{5}{6}k - \frac{13}{4} = -4\frac{7}{12} + 2\frac{1}{3}k + 1\frac{5}{6}k \quad \left\{ \frac{2}{5} \right\}$$

$$72) -4\frac{37}{60} + 1\frac{2}{3}n - \frac{1}{3}n = -1\frac{1}{2}n - 3\frac{1}{5} \quad \left\{ \frac{1}{2} \right\}$$

$$74) \frac{5}{3} + \frac{11}{6}x + \frac{1}{2}x = 2\frac{1}{3}x + 1 + 1\frac{1}{3}x \quad \left\{ \frac{1}{2} \right\}$$

$$76) \frac{9}{4}n - 1\frac{3}{5} = \frac{7}{2}n + 1 + 2n + 1\frac{23}{120} \quad \left\{ -1\frac{1}{6} \right\}$$

$$78) \frac{11}{4}x - 2\frac{1}{2} = 7\frac{1}{2} - x \quad \left\{ 2\frac{2}{3} \right\}$$

$$80) \frac{1}{4}v - 2v = 1\frac{1}{2}v - \frac{247}{20} \quad \left\{ 3\frac{4}{5} \right\}$$

$$81) b + \frac{9}{5} = 1\frac{1}{2}b + 2\frac{1}{20} \quad \left\{ -\frac{1}{2} \right\}$$

$$83) -4\frac{11}{60} - a = a - 1\frac{1}{4} - 3\frac{1}{3} \quad \left\{ \frac{1}{5} \right\}$$

$$85) \frac{5}{6}k + \frac{1}{3} = -3\frac{5}{6} - \frac{5}{4}k \quad \left\{ -2 \right\}$$

$$87) -1\frac{1}{4}x - 4 = \frac{3}{2} + 1\frac{1}{2}x \quad \left\{ -2 \right\}$$

$$89) -\frac{5}{12} + x = 1\frac{3}{4}x - x \quad \left\{ 1\frac{2}{3} \right\}$$

$$91) r + 3\frac{2}{3} = \frac{326}{75} + \frac{4}{5}r \quad \left\{ 3\frac{2}{5} \right\}$$

$$93) \frac{521}{60} + \frac{1}{5}b = 3\frac{1}{2}b + 2 + 2\frac{5}{6} \quad \left\{ 1\frac{1}{6} \right\}$$

$$95) \frac{5}{4}n + n = 2\frac{11}{18} - 1\frac{2}{3}n \quad \left\{ \frac{2}{3} \right\}$$

$$97) -2a + 3\frac{3}{5} = 2\frac{2}{5}a + 2\frac{1}{2} \quad \left\{ \frac{1}{4} \right\}$$

$$99) \frac{7}{5}x - 1 = -6x + 1\frac{7}{15} \quad \left\{ \frac{1}{3} \right\}$$

$$101) 2\frac{39}{140} - 1\frac{5}{6}m = \frac{5}{4}m + \frac{18}{5} \quad \left\{ -\frac{3}{7} \right\}$$

$$103) \frac{1}{6}x + \frac{5}{2} = \frac{1}{2}x + \frac{11}{6} \quad \left\{ 2 \right\}$$

$$105) 2\frac{1}{6}n + 4\frac{5}{8} - \frac{22}{7}n - 14\frac{109}{392} = -\frac{23}{6}n + \frac{1}{7} \quad \left\{ 3\frac{3}{7} \right\}$$

$$107) \frac{683}{200} + \frac{3}{2}x - \frac{7}{2} + 2x = \frac{23}{8}x + \frac{3}{5}x \quad \left\{ 3\frac{2}{5} \right\}$$

$$109) -1\frac{1}{2}b + \frac{1}{2} = -\frac{10}{3} + \frac{25}{6}b + 2b \quad \left\{ \frac{1}{2} \right\}$$

$$111) 8\frac{529}{720} - \frac{7}{6}v + \frac{4}{5} - 4\frac{1}{3} = \frac{11}{8}v - 2 \quad \left\{ 2\frac{5}{6} \right\}$$

$$113) 1\frac{4}{5}x - 2\frac{1}{2} = -\frac{1}{4}x - 4\frac{59}{70} \quad \left\{ -1\frac{1}{7} \right\}$$

$$115) -16\frac{347}{392} - 1\frac{3}{7}p = 4p - 1\frac{3}{8} \quad \left\{ -2\frac{6}{7} \right\}$$

$$117) \frac{799}{56} + 2x = 4\frac{4}{7}x + 4\frac{5}{8} \quad \left\{ 3\frac{3}{4} \right\}$$

$$119) -3\frac{63}{160} + 2\frac{3}{5}r = \frac{1}{3}r - \frac{3}{4}r \quad \left\{ 1\frac{1}{8} \right\}$$

$$121) -\frac{5}{7} + 2b = \frac{1}{2}b - b \quad \left\{ \frac{2}{7} \right\}$$

$$82) x + \frac{4}{3} = -\frac{445}{36} - 1\frac{5}{6}x \quad \left\{ -4\frac{5}{6} \right\}$$

$$84) -\frac{79}{36} - \frac{5}{6}x = -\frac{7}{5}x - \frac{2}{5} \quad \left\{ 3\frac{1}{6} \right\}$$

$$86) \frac{13}{36} - \frac{1}{3}p + 1\frac{1}{5}p = -1\frac{4}{5}p + \frac{1}{2}p \quad \left\{ -\frac{1}{6} \right\}$$

$$88) 2\frac{1}{6}m + \frac{47}{15} = 3\frac{1}{2}m - 3\frac{2}{3} + 3\frac{4}{5} \quad \left\{ 2\frac{1}{4} \right\}$$

$$90) 2\frac{1}{2}n - \frac{4}{5} + 2 = -5\frac{62}{75} - 2\frac{3}{5}n + 1 + 1\frac{1}{3}n \quad \left\{ -1\frac{3}{5} \right\}$$

$$92) -\frac{17}{6}n + 5 = \frac{61}{18} + 2n \quad \left\{ \frac{1}{3} \right\}$$

$$94) -1\frac{1}{6}v + 2\frac{2}{3} = -\frac{11}{4}v + 1\frac{1}{2}v + 2\frac{3}{5} \quad \left\{ -\frac{4}{5} \right\}$$

$$96) -\frac{8}{3}x + 1\frac{5}{6} + \frac{3}{4} = \frac{7}{60} - \frac{1}{5}x \quad \left\{ 1 \right\}$$

$$98) -1\frac{1}{5}k + 4 + \frac{7}{2}k - 9\frac{83}{150} = \frac{1}{3}k + 3\frac{3}{5}k \quad \left\{ -3\frac{2}{5} \right\}$$

$$100) -6 - \frac{7}{2}x + \frac{3}{2}x = \frac{1}{6}x + 1\frac{2}{3} - 6x \quad \left\{ 2 \right\}$$

$$102) 2\frac{1}{3}n + \frac{53}{60} = 1\frac{1}{5}n - \frac{1}{4} \quad \left\{ -1 \right\}$$

$$104) -\frac{7}{24} - 2\frac{5}{6}p = \frac{1}{6}p + 1 + 2\frac{5}{6} \quad \left\{ -1\frac{3}{8} \right\}$$

$$106) -\frac{47}{25} + 2r = \frac{22}{5}r + 1 \quad \left\{ -1\frac{1}{5} \right\}$$

$$108) 1\frac{1}{3}n - 3\frac{5}{7} = -4\frac{209}{224} + \frac{1}{4}n \quad \left\{ -1\frac{1}{8} \right\}$$

$$110) -1\frac{1}{6}b - \frac{3}{2} - \frac{1}{2}b = -1\frac{41}{84} - \frac{12}{7}b \quad \left\{ \frac{1}{4} \right\}$$

$$112) 2x - 3\frac{1}{6} = -2\frac{5}{6} + 1\frac{2}{3}x \quad \left\{ 1 \right\}$$

$$114) k - \frac{1}{4} - 3\frac{1}{2} = -4\frac{3}{7} + 1\frac{1}{4}k \quad \left\{ 2\frac{5}{7} \right\}$$

$$116) \frac{6}{7}a + 3\frac{3}{4} = 4\frac{151}{224} - \frac{3}{8}a \quad \left\{ \frac{3}{4} \right\}$$

$$118) -\frac{39}{7} - \frac{2}{3}n = -2\frac{3}{4}n - \frac{9}{4}n \quad \left\{ 1\frac{2}{7} \right\}$$

$$120) -3\frac{3}{4}m - 4 = 4\frac{9}{28} + m - 2\frac{1}{4} - 2 \quad \left\{ -\frac{6}{7} \right\}$$

$$122) -13\frac{131}{168} + 4\frac{3}{7}x = -1\frac{3}{4}x + \frac{5}{3} \quad \left\{ 2\frac{1}{2} \right\}$$

$$123) \frac{1943}{126} + \frac{6}{7}v = \frac{29}{6}v + 2\frac{1}{6} \quad \left\{ 3\frac{1}{3} \right\}$$

$$125) \frac{1}{2}n + 1 = -\frac{1}{7}n - \frac{19}{98} \quad \left\{ -1\frac{6}{7} \right\}$$

$$127) 1\frac{5}{6}k - 2k + 4\frac{2}{3} = -\frac{3}{2}k + 2 \quad \{-2\}$$

$$129) -2\frac{11}{21} + \frac{1}{2}x = 1\frac{4}{7}x - 2\frac{1}{6} \quad \left\{ -\frac{1}{3} \right\}$$

$$131) -\frac{7}{40} - 3\frac{1}{4}x = -\frac{7}{5}x - 1\frac{1}{2}x \quad \left\{ -\frac{1}{2} \right\}$$

$$133) 2\frac{2}{3}n - \frac{116}{15} = \frac{4}{5}n + \frac{2}{3} \quad \left\{ 4\frac{1}{2} \right\}$$

$$135) \frac{21}{8}b + \frac{19}{6} = 4\frac{5}{192} + 2\frac{1}{6}b \quad \left\{ 1\frac{7}{8} \right\}$$

$$137) \frac{2}{5}n + \frac{39}{8}n = 3\frac{39}{80} + 4\frac{1}{2}n \quad \left\{ 4\frac{1}{2} \right\}$$

$$139) -1\frac{2}{5}a + \frac{1531}{150} = \frac{29}{8}a + \frac{13}{6} \quad \left\{ 1\frac{3}{5} \right\}$$

$$141) 2n + \frac{7}{5} = \frac{1}{6} + 1\frac{2}{5}n + \frac{5}{6} - \frac{2}{5} \quad \left\{ -1\frac{1}{3} \right\}$$

$$143) -4 + \frac{1}{4}x - 1\frac{1}{2}x = -4x - 1\frac{4}{5} \quad \left\{ \frac{4}{5} \right\}$$

$$145) 4\frac{7}{8}p - 1\frac{3}{7} = \frac{2641}{224} + p - \frac{3}{2} - 1\frac{1}{3}p \quad \left\{ 2\frac{1}{4} \right\}$$

$$147) -1\frac{3}{4}x + \frac{17}{21} = -1\frac{1}{6}x - \frac{6}{7} + 1\frac{1}{2} \quad \left\{ \frac{2}{7} \right\}$$

$$149) 4\frac{5}{6}r + \frac{39}{8} + 3\frac{5}{7} - 2\frac{127}{168} = \frac{2}{3}r + \frac{5}{4}r \quad \{-2\}$$

$$151) 3\frac{1}{2}x - \frac{4}{7} = 7\frac{25}{42} - 2\frac{5}{8}x \quad \left\{ 1\frac{1}{3} \right\}$$

$$153) 1\frac{4}{5}x + \frac{79}{15} = \frac{7}{5}x + 4\frac{1}{3} \quad \left\{ -2\frac{1}{3} \right\}$$

$$155) -2\frac{2}{3}n + \frac{2}{5}n = 11\frac{2}{3} + n \quad \left\{ -3\frac{4}{7} \right\}$$

$$157) \frac{845}{56} - 3\frac{1}{6}a = -2\frac{2}{3}a + \frac{29}{7}a \quad \left\{ 3\frac{1}{4} \right\}$$

$$159) -2k + 1\frac{1}{8} = k + \frac{5}{3} + 4\frac{4}{7}k - \frac{13}{24} \quad \{0\}$$

$$161) 4\frac{7}{8}n + 3n = 1\frac{41}{64} + n + \frac{5}{2}n \quad \left\{ \frac{3}{8} \right\}$$

$$163) -\frac{103}{72} + 3\frac{2}{3}p + 1 + 3\frac{1}{2} = p - 1\frac{3}{8} \quad \left\{ -1\frac{2}{3} \right\}$$

$$124) 1\frac{1}{2}n + 5\frac{51}{56} = -2\frac{2}{5}n + \frac{9}{7} + \frac{1}{5}n \quad \left\{ -1\frac{1}{4} \right\}$$

$$126) -4\frac{29}{96} + \frac{15}{8}x = \frac{13}{6}x - 2\frac{2}{3} - 2 \quad \left\{ 1\frac{1}{4} \right\}$$

$$128) \frac{857}{672} - \frac{2}{3}a + 1\frac{1}{2}a = \frac{6}{7}a + 1 - 1\frac{1}{8}a \quad \left\{ -\frac{1}{4} \right\}$$

$$130) -\frac{3}{2}x - \frac{1}{2}x = -3\frac{1}{3}x - 2\frac{1}{3} \quad \left\{ -1\frac{3}{4} \right\}$$

$$132) -\frac{5}{3}p + 1 = -\frac{671}{448} - \frac{3}{7}p + 1 - \frac{7}{8}p \quad \left\{ 4\frac{1}{8} \right\}$$

$$134) 4\frac{2}{7}m + 3\frac{5}{7} - \frac{1}{5} = -\frac{941}{1260} - 1\frac{1}{6}m + 1\frac{4}{5}m \quad \left\{ -1\frac{1}{6} \right\}$$

$$136) \frac{55}{63} - 1\frac{5}{7}x = 1\frac{2}{3}x + 2 \quad \left\{ -\frac{1}{3} \right\}$$

$$138) -\frac{131}{8} + \frac{1}{3}r = \frac{3}{4}r + 1\frac{1}{2} - 3\frac{1}{6}r \quad \left\{ 6\frac{1}{2} \right\}$$

$$140) 4\frac{1}{4}x - \frac{11}{32} = x + \frac{7}{2}x \quad \left\{ -1\frac{3}{8} \right\}$$

$$142) 3\frac{1}{3} + 2\frac{5}{6}v = v + \frac{3}{2} \quad \{-1\}$$

$$144) -2\frac{1}{2}a + \frac{3}{4} = -11\frac{193}{280} + a + \frac{5}{7} + 6\frac{1}{8} \quad \left\{ 1\frac{3}{5} \right\}$$

$$146) -\frac{7}{4}k - 6\frac{45}{56} = -3\frac{1}{6}k - \frac{3}{7} \quad \left\{ 4\frac{1}{2} \right\}$$

$$148) -1\frac{2}{5}n + 1 = -5\frac{1}{3} + \frac{1}{2}n \quad \left\{ 3\frac{1}{3} \right\}$$

$$150) \frac{2}{3}m + 3\frac{2}{3} + \frac{4}{5}m = 8\frac{59}{120} - 1\frac{3}{4}m \quad \left\{ 1\frac{1}{2} \right\}$$

$$152) 2\frac{2}{3}n - \frac{1003}{84} = -\frac{4}{7}n + \frac{17}{4} \quad \{5\}$$

$$154) -2\frac{3}{4}b + \frac{4}{3}b + 3\frac{1}{84} = -1\frac{1}{7}b + 3\frac{2}{7} \quad \{-1\}$$

$$156) -5v + 4\frac{1}{5} + \frac{3}{4}v = -4\frac{7}{15} + \frac{3}{4}v - 1\frac{2}{3}v \quad \left\{ 2\frac{3}{5} \right\}$$

$$158) x + 1\frac{1}{5} - 2\frac{1}{8} = -\frac{181}{40} + 4\frac{3}{5}x \quad \{1\}$$

$$160) 1\frac{2}{7}x - 3\frac{104}{245} = \frac{8}{5}x - 3\frac{1}{5} \quad \left\{ -\frac{5}{7} \right\}$$

$$162) 1\frac{31}{56} + 1\frac{1}{3}m = 1\frac{2}{3}m + 1\frac{3}{7} \quad \left\{ \frac{3}{8} \right\}$$

$$164) \frac{8}{5}x + 4\frac{1}{2} - 1\frac{1}{3} = \frac{27}{10} + 2x \quad \left\{ 1\frac{1}{6} \right\}$$

$$165) -n + 1 \frac{6}{7} = \frac{83}{28} + 1 \frac{4}{7}n - 1 \frac{5}{6}n \quad \left\{ -1 \frac{1}{2} \right\}$$

$$167) -2 \frac{3}{8} + 1 \frac{1}{8}b = b + \frac{1}{2} - \frac{1}{2}b \quad \left\{ 4 \frac{3}{5} \right\}$$

$$169) 1 \frac{1}{2}v - 1 + 4 \frac{6}{7} = 3 \frac{181}{252} + 2 \frac{1}{3}v \quad \left\{ \frac{1}{6} \right\}$$

$$171) \frac{6}{5}x - 3 \frac{2}{3}x + 6 \frac{64}{105} = x - 2 \frac{4}{5} \quad \left\{ 2 \frac{5}{7} \right\}$$

$$173) -\frac{13}{7}n + 1 \frac{1}{2} = -5 \frac{5}{12} - 3 \frac{5}{6}n \quad \left\{ -3 \frac{1}{2} \right\}$$

$$175) 1 \frac{1}{2}x + 1 + 1 \frac{5}{6} + 11 \frac{77}{480} = \frac{19}{4}x + \frac{7}{5} \quad \left\{ 3 \frac{7}{8} \right\}$$

$$177) -1 \frac{11}{40} + \frac{1}{2}n = n - \frac{2}{5} \quad \left\{ -1 \frac{3}{4} \right\}$$

$$179) -\frac{1}{3}r + 1 = -\frac{13}{15} + 2r \quad \left\{ \frac{4}{5} \right\}$$

$$181) -\frac{3}{5}m - \frac{3}{7} + 3 \frac{5}{6}m + 1 \frac{1873}{2100} = m + 3 \frac{1}{4} \quad \left\{ \frac{4}{5} \right\}$$

$$183) \frac{237}{200} + 1 \frac{1}{4}x = 1 \frac{1}{2}x + \frac{33}{8} + \frac{4}{5}x \quad \left\{ -2 \frac{4}{5} \right\}$$

$$185) -\frac{1}{7}n - \frac{14}{3} = \frac{2}{3}n + 1 \quad \{-7\}$$

$$187) 1 \frac{29}{48} + \frac{19}{4}a - 3 \frac{3}{4} - 1 \frac{2}{3}a = a + \frac{3}{2} \quad \left\{ 1 \frac{3}{4} \right\}$$

$$189) 1 \frac{1}{5}x + 1 = -\frac{19}{7} + 2 \frac{1}{2}x \quad \left\{ 2 \frac{6}{7} \right\}$$

$$191) -1 \frac{7}{8}n - \frac{3}{7} - \frac{1}{2} = -\frac{55}{112} - 1 \frac{3}{4}n \quad \left\{ -3 \frac{1}{2} \right\}$$

$$193) x - 1 \frac{3}{7} = -16 \frac{185}{252} - 3 \frac{5}{6}x \quad \left\{ -3 \frac{1}{6} \right\}$$

$$195) \frac{11}{5}b + 2 \frac{2}{5} + 4 \frac{2}{3} = -5 \frac{3}{4}b + \frac{901}{60} \quad \{1\}$$

$$197) 2 \frac{73}{84} + 1 \frac{1}{4}x = 3 \frac{1}{2}x + 1 \frac{2}{7} - \frac{2}{3}x \quad \{1\}$$

$$199) 4 \frac{3}{4}k + \frac{3459}{224} = \frac{14}{3}k + 4 \frac{2}{7} + 4 \frac{1}{3}k \quad \left\{ 2 \frac{5}{8} \right\}$$

$$201) \frac{1}{2} \left(v - \frac{5}{2} \right) = 1 \frac{5}{6}v - 6 \frac{1}{12} \quad \left\{ 3 \frac{5}{8} \right\}$$

$$203) -3 \frac{8}{9} \left(\frac{53}{9}x + 1 \right) - 2 = \frac{6971}{405} + \frac{1}{5}x \quad \{-1\}$$

$$205) -3 \frac{5}{6} \left(-\frac{1}{2}n - 1 \frac{1}{3} \right) = 6 \frac{3}{8} - \frac{15}{8}n \quad \left\{ \frac{1}{3} \right\}$$

$$166) -1 \frac{1}{3}x + 4 \frac{1}{2}x = -1 \frac{5}{12} - 2 \frac{1}{2}x \quad \left\{ -\frac{1}{4} \right\}$$

$$168) 2r + 1 \frac{1}{8} + 2 \frac{1}{3}r - 3 \frac{49}{120} = \frac{11}{4}r + \frac{1}{4} \quad \left\{ 1 \frac{3}{5} \right\}$$

$$170) -7 \frac{31}{70} + \frac{2}{7}n - 2 + 4 \frac{4}{5} = n - \frac{18}{7} - 3 \frac{1}{2} \quad \{2\}$$

$$172) \frac{389}{105} + \frac{11}{4}a - \frac{4}{5} - \frac{1}{4}a = 3 \frac{1}{6}a + \frac{11}{7} \quad \{2\}$$

$$174) -\frac{17}{3} + \frac{5}{6}k = -1 \frac{1}{2}k - 1 \quad \{2\}$$

$$176) -\frac{2}{5}p + 1 + 1 \frac{1}{2} = -\frac{1}{15} + \frac{2}{3}p - 2p \quad \left\{ -2 \frac{3}{4} \right\}$$

$$178) \frac{332}{21} + x = \frac{25}{7}x + 4 \frac{2}{3} \quad \left\{ 4 \frac{1}{3} \right\}$$

$$180) 1 \frac{3}{5}n + \frac{947}{105} = -\frac{4}{3}n + 3 \frac{4}{7} \quad \left\{ -1 \frac{6}{7} \right\}$$

$$182) -2 \frac{5}{6}b + \frac{460}{63} = -1 \frac{3}{7}b + \frac{1}{2}b \quad \left\{ 3 \frac{5}{6} \right\}$$

$$184) \frac{1}{6}v + \frac{1}{2}v = 1 \frac{7}{16} + 1 \frac{1}{6}v \quad \left\{ -2 \frac{7}{8} \right\}$$

$$186) -3 \frac{1}{2}x + \frac{4}{3} = x + 1 \frac{3}{8}x + \frac{221}{60} \quad \left\{ -\frac{2}{5} \right\}$$

$$188) \frac{29}{6}p - \frac{3}{2} = \frac{1}{2}p - 6 \frac{7}{10} \quad \left\{ -1 \frac{1}{5} \right\}$$

$$190) -8 \frac{1}{2} - 1 \frac{1}{3}m = -8m - \frac{7}{2} \quad \left\{ \frac{3}{4} \right\}$$

$$192) -\frac{1}{2}p + 1 - 5 = -6 \frac{29}{32} + \frac{1}{4}p \quad \left\{ 3 \frac{7}{8} \right\}$$

$$194) \frac{5}{8}n - \frac{1}{2}n = -5 \frac{17}{56} + n + \frac{17}{7} + 3 \frac{3}{4} \quad \{-1\}$$

$$196) 3 \frac{5}{8}n - 2 \frac{7}{8} = \frac{10}{7}n - 7 \frac{15}{56} \quad \{-2\}$$

$$198) -\frac{1}{5}r + \frac{1}{4} = -\frac{131}{21} + \frac{1}{2}r + \frac{11}{7} + 3 \frac{3}{4} \quad \left\{ 1 \frac{2}{3} \right\}$$

$$200) -\frac{1}{2}a + 10 \frac{41}{70} = \frac{32}{7}a + \frac{15}{4}a \quad \left\{ 1 \frac{1}{5} \right\}$$

$$202) \frac{119}{150} + 1 \frac{2}{5}x = -\frac{14}{3} \left(\frac{3}{5}x + 1 \right) \quad \left\{ -1 \frac{3}{10} \right\}$$

$$204) 1 \frac{2}{3} \left(-\frac{27}{7}k + 1 \right) = -\frac{12}{7}k - 38 \frac{17}{42} \quad \left\{ 8 \frac{1}{2} \right\}$$

$$206) -3 \frac{1}{7} \left(3 \frac{2}{5}p + \frac{5}{4} \right) = 3 \frac{1}{9}p - 3 \frac{13}{14} \quad \{0\}$$

$$207) -21\frac{237}{320} + \frac{13}{8}n = -n - \frac{3}{5}\left(\frac{17}{9}n + 1\right) \quad \left\{\begin{array}{l} 5 \\ 8 \end{array}\right\}$$

$$209) 4x - \frac{23}{10} = -\left(1\frac{7}{10}x - \frac{91}{10}\right) \quad \{2\}$$

$$211) -\frac{15}{8}\left(-\frac{31}{8}n + \frac{1}{2}\right) = -20\frac{31}{32} - 2\frac{3}{4}n \quad \{-2\}$$

$$213) -\frac{1}{2}v - \frac{19}{30} = -\frac{1}{8}\left(\frac{4}{3}v + 8\right) \quad \left\{1\frac{1}{10}\right\}$$

$$215) -1\frac{4}{5}x + 10\frac{1177}{2100} = 2\frac{1}{6}\left(1\frac{5}{7}x + 5\frac{9}{10}\right) + 5\frac{3}{5}x \quad \left\{-\frac{1}{5}\right\}$$

$$216) -1\frac{2}{3}\left(a + 1\frac{1}{5}\right) + 1\frac{1}{2} = \frac{7}{9}a - 2\frac{17}{18} \quad \{1\}$$

$$218) -3\frac{3}{10}x - 32\frac{63}{80} = -2\frac{1}{2}\left(-8x + \frac{1}{2}\right) + \frac{1}{2} \quad \left\{-1\frac{3}{8}\right\}$$

$$220) -x + 30 = 7\left(\frac{3}{7}x + 3\frac{1}{2}\right) \quad \left\{1\frac{3}{8}\right\}$$

$$222) -\frac{3}{8}\left(p + 1\frac{5}{9}\right) = -p - 1\frac{65}{96} \quad \left\{-1\frac{3}{4}\right\}$$

$$224) -14\frac{3067}{3150} + 1\frac{1}{2}m = -\frac{3}{7}m + 1\frac{3}{5}\left(-3\frac{1}{2}m - \frac{8}{9}\right) \quad \left\{1\frac{4}{5}\right\}$$

$$225) -1\frac{8}{9} - \frac{3}{2}b = 2\left(\frac{1}{2}b + 1\right) \quad \left\{-1\frac{5}{9}\right\}$$

$$227) 35\frac{35}{54} - 1\frac{1}{7}x = \frac{13}{3}\left(4\frac{1}{6}x - 2\frac{1}{9}\right) \quad \left\{2\frac{1}{3}\right\}$$

$$229) 2\left(v + 1\frac{3}{8}\right) = 4\frac{7}{20} + \frac{2}{5}v \quad \{1\}$$

$$231) 1\frac{37}{252} - \frac{3}{8}a = 2\frac{2}{9}\left(-\frac{1}{2}a + 2\right) - 2\frac{2}{3} \quad \left\{\frac{6}{7}\right\}$$

$$233) -\frac{103}{36} - 1\frac{1}{2}x = \frac{8}{9} - 2\left(x + \frac{3}{5}\right) \quad \left\{5\frac{1}{10}\right\}$$

$$235) -3\frac{4}{9}\left(1\frac{8}{9}k + 3\frac{5}{8}\right) = -3\frac{2}{3}k - \frac{3617}{216} \quad \left\{1\frac{1}{2}\right\}$$

$$237) 4\frac{7}{9}n + \frac{287}{216} = \frac{5}{6}\left(4\frac{1}{10}n - \frac{7}{5}\right) \quad \left\{-1\frac{5}{6}\right\}$$

$$239) -\frac{1}{2}m - 7\frac{20}{21} = -3\frac{1}{2}\left(m - \frac{10}{7}\right) + \frac{1}{3}m \quad \left\{4\frac{6}{7}\right\}$$

$$241) -1\frac{6}{7} - \frac{3}{2}\left(1\frac{1}{3}x + 1\right) = \frac{7}{9}x - 5\frac{37}{84} \quad \left\{\frac{3}{4}\right\}$$

$$243) 1\frac{2}{3} - \left(\frac{7}{9}n + 2\frac{4}{7}\right) = \frac{5}{9}n - 5\frac{10}{21} \quad \left\{3\frac{3}{7}\right\}$$

$$245) -1\frac{3}{4}\left(\frac{7}{2}x + \frac{3}{7}\right) = 18\frac{73}{240} + \frac{3}{5}x \quad \left\{-2\frac{5}{6}\right\}$$

$$208) -\frac{53}{90} + \frac{2}{3}m = \frac{3}{5}\left(m - 1\frac{1}{6}\right) \quad \left\{-1\frac{2}{3}\right\}$$

$$210) 1\frac{7}{10} - 1\frac{2}{3}\left(r + 1\frac{2}{3}\right) = -10\frac{139}{630} + 2\frac{1}{3}r \quad \left\{2\frac{2}{7}\right\}$$

$$212) -\frac{1}{10}b + \frac{226}{45} = 2\left(-\frac{5}{9}b + 1\frac{1}{2}\right) \quad \{-2\}$$

$$214) -7\frac{17}{20} - \frac{1}{5}n = -2\left(n + 2\frac{1}{8}\right) \quad \{2\}$$

$$217) 7\frac{1}{2} + 3\frac{1}{6}k = -\frac{11}{4}\left(1\frac{1}{3}k + 1\right) \quad \left\{-1\frac{1}{2}\right\}$$

$$219) 1\frac{38}{225} - 1\frac{9}{10}p = -1\frac{1}{9}\left(\frac{3}{4}p + \frac{1}{10}\right) \quad \left\{1\frac{1}{5}\right\}$$

$$221) 2\frac{1}{2}\left(-7\frac{3}{4}n + \frac{2}{3}\right) = -\frac{541}{20} + 4\frac{5}{9}n \quad \left\{1\frac{1}{5}\right\}$$

$$223) -21\frac{132}{245} + 3\frac{2}{5}x = -\frac{6}{7}\left(-1\frac{2}{7}x + 1\right) \quad \{9\}$$

$$226) 1\frac{3}{8}n + 21\frac{229}{320} = -\frac{14}{5} + 2\frac{1}{4}\left(\frac{13}{4}n + 1\right) \quad \left\{3\frac{3}{4}\right\}$$

$$228) \frac{19}{5}\left(\frac{5}{9}r - 1\frac{3}{4}\right) + \frac{2}{5} = -4\frac{29}{36} + 1\frac{4}{9}r \quad \left\{2\frac{1}{6}\right\}$$

$$230) \frac{949}{48} - 2\frac{1}{4}n = -8\left(\frac{11}{3}n + 1\frac{1}{2}\right) + 1\frac{2}{3}n \quad \left\{-1\frac{1}{4}\right\}$$

$$232) -3\frac{1}{7}\left(x + 5\frac{3}{4}\right) = -\frac{439}{42} + \frac{2}{3}x \quad \{-2\}$$

$$234) \frac{23}{9} + 1\frac{1}{6}\left(\frac{1}{5}n - 2\frac{3}{7}\right) = 1\frac{1}{3}n - 4\frac{31}{630} \quad \left\{3\frac{3}{7}\right\}$$

$$236) 2p - 5\frac{16}{25} = 2\frac{1}{10}\left(\frac{2}{5}p - \frac{1}{5}\right) \quad \left\{4\frac{1}{2}\right\}$$

$$238) -\frac{11}{30} - \frac{1}{3}x = -\frac{17}{5}\left(-\frac{7}{10}x - 2\frac{1}{3}\right) - \frac{1}{2}x \quad \left\{-3\frac{3}{4}\right\}$$

$$240) 1\frac{1}{2}\left(\frac{9}{10}r + 1\right) = \frac{357}{160} + 1\frac{1}{5}r \quad \left\{4\frac{7}{8}\right\}$$

$$242) -\frac{5}{7}\left(1\frac{1}{6}b + 1\frac{6}{7}\right) = 2\frac{7}{10}b - \frac{328}{2205} \quad \left\{-\frac{1}{3}\right\}$$

$$244) -\frac{31601}{6720} + 2\frac{7}{8}v = -\frac{1}{7}\left(1\frac{1}{2}v + 4\frac{5}{6}\right) + 1\frac{2}{5}v \quad \left\{2\frac{3}{8}\right\}$$

$$246) -21\frac{163}{252} + 1\frac{1}{8}n = -\frac{16}{7}\left(1\frac{3}{4}n + 1\right) \quad \left\{3\frac{7}{9}\right\}$$

$$247) \quad 15\frac{1}{5} - 3\frac{3}{10}a = -2\left(-\frac{1}{2}a + 1\right) \quad \{4\}$$

$$249) \quad -\frac{1}{2}\left(p - \frac{1}{2}\right) - \frac{7}{8}p = -\frac{1}{9} - 1\frac{1}{8}p \quad \{1\frac{4}{9}\}$$

$$251) \quad \frac{1}{3}\left(\frac{3}{2}x - \frac{3}{10}\right) = 9\frac{13}{20} - 6x \quad \{1\frac{1}{2}\}$$

$$253) \quad 4\frac{17}{350} - 1\frac{1}{3}r = 5\frac{1}{5}\left(-\frac{4}{5}r + \frac{24}{7}\right) \quad \{4\frac{7}{8}\}$$

$$255) \quad 2\left(b + \frac{1}{2}\right) - 3\frac{3}{4} = -2\frac{1}{2}b - \frac{1}{20} \quad \{3\frac{3}{5}\}$$

$$257) \quad -2\frac{1}{5}x - 6\frac{377}{945} = 2\left(2\frac{1}{3}x + \frac{23}{7}\right) \quad \{-1\frac{8}{9}\}$$

$$259) \quad -\frac{95}{144} - \frac{4}{9}a = -\frac{1}{4}\left(a - 1\frac{1}{4}\right) \quad \{-5\}$$

$$261) \quad -1\frac{3}{10} - 2\frac{1}{9}\left(v + 4\frac{7}{9}\right) = -11\frac{313}{810} + 1\frac{5}{6}v \quad \{0\}$$

$$263) \quad 2\frac{5}{7}\left(-\frac{3}{7}x + 1\right) = -5\frac{122}{147} + 1\frac{2}{5}x \quad \{3\frac{1}{3}\}$$

$$265) \quad -1\frac{33}{35} + k = -2\frac{5}{7}\left(-k + \frac{2}{5}\right) \quad \{-\frac{1}{2}\}$$

$$267) \quad -1\frac{1}{4} + \frac{4}{5}\left(2p + \frac{16}{3}\right) = -\frac{5}{6} - \frac{1}{2}p \quad \{-1\frac{5}{6}\}$$

$$269) \quad -1\frac{1}{9}\left(m + \frac{5}{4}\right) + \frac{3}{10} = \frac{7}{15} + 2m \quad \{-\frac{1}{2}\}$$

$$271) \quad 9\frac{29}{60} - 2x = \frac{5}{3}\left(x + \frac{7}{4}\right) + \frac{29}{10} \quad \{1\}$$

$$273) \quad -v - 24\frac{25}{48} = 2\left(-2\frac{5}{8}v - \frac{13}{6}\right) \quad \{4\frac{3}{4}\}$$

$$275) \quad \frac{13}{3} + x = -1\frac{1}{3}\left(3\frac{1}{4}x + \frac{3}{4}\right) \quad \{-1\}$$

$$277) \quad \frac{10}{3}\left(n + 1\frac{1}{3}\right) - n = 15\frac{19}{36} - 1\frac{1}{6}n \quad \{3\frac{1}{6}\}$$

$$279) \quad -\frac{1}{10}\left(\frac{2}{5}k + 1\right) = \frac{3}{5}k - 3\frac{29}{150} \quad \{4\frac{5}{6}\}$$

$$281) \quad 5\frac{3}{8}\left(2\frac{7}{9}x - 1\frac{1}{2}\right) + 5\frac{2}{3} = -\frac{12041}{240} - 3\frac{4}{9}x \quad \{-2\frac{3}{5}\}$$

$$283) \quad r - \frac{1}{4}\left(r + 4\frac{1}{5}\right) = -r + 5\frac{3}{40} \quad \{3\frac{1}{2}\}$$

$$285) \quad \frac{5}{9}n + 3\frac{3977}{4536} = 3\frac{7}{8}\left(\frac{1}{7}n + 1\right) \quad \{-\frac{8}{9}\}$$

$$287) \quad -r - 35\frac{1}{25} = -1\frac{4}{5}\left(2\frac{9}{10}r + \frac{27}{5}\right) \quad \{6\}$$

$$248) \quad \frac{3}{4}\left(k - 3\frac{1}{4}\right) = 5k - 26\frac{25}{48} \quad \{5\frac{2}{3}\}$$

$$250) \quad 4n + \frac{209}{45} = 2\frac{5}{6}\left(\frac{9}{5}n + 1\frac{5}{6}\right) \quad \{-\frac{1}{2}\}$$

$$252) \quad 2\frac{5}{9}\left(-2m + \frac{13}{4}\right) = -19\frac{551}{900} + 3\frac{1}{10}m \quad \{3\frac{2}{5}\}$$

$$254) \quad -6\frac{6}{7} - 3\frac{1}{3}n = -1\frac{3}{7}\left(n + \frac{2}{5}\right) \quad \{-3\frac{3}{10}\}$$

$$256) \quad -\frac{11}{4}x + 2\frac{3}{10}\left(x + \frac{30}{7}\right) = -10\frac{17}{70} - 10\frac{1}{2}x \quad \{-2\}$$

$$258) \quad -2\frac{37}{168} + 5\frac{3}{4}r = 2\frac{1}{6}r + \frac{18}{7}\left(-2\frac{1}{3}r + 1\right) \quad \{\frac{1}{2}\}$$

$$260) \quad 1\frac{1}{3}\left(1\frac{1}{5}n + \frac{59}{10}\right) = -1\frac{1}{6}n + 11\frac{13}{40} \quad \{1\frac{1}{4}\}$$

$$262) \quad 7\frac{1}{10} - \frac{6}{5}x = -\frac{1}{2}\left(\frac{3}{5}x + 1\right) \quad \{8\frac{4}{9}\}$$

$$264) \quad 3\frac{23}{24} + 2n = -\left(n + \frac{5}{3}\right) + 1\frac{7}{8} \quad \{-1\frac{1}{4}\}$$

$$266) \quad \frac{2}{5}\left(-2x + 1\frac{1}{4}\right) = 1\frac{1}{2}x - \frac{737}{90} \quad \{3\frac{7}{9}\}$$

$$268) \quad -\frac{2}{9} + \frac{7}{4}\left(-\frac{1}{2}n + \frac{9}{2}\right) = -6n + \frac{1471}{144} \quad \{\frac{1}{2}\}$$

$$270) \quad 5\frac{5}{7}\left(r + 5\frac{1}{6}\right) = 37\frac{11}{12} - r \quad \{1\frac{1}{4}\}$$

$$272) \quad -1\frac{3037}{3150} + 2\frac{1}{6}n = 1\frac{3}{5}\left(1\frac{1}{10}n - 1\frac{1}{7}\right) \quad \{\frac{1}{3}\}$$

$$274) \quad -\frac{29}{30} - 1\frac{2}{5}b = -\frac{1}{3}b + \frac{7}{10}\left(\frac{1}{2}b + 1\frac{1}{4}\right) \quad \{-1\frac{3}{10}\}$$

$$276) \quad -\frac{11}{14} + 1\frac{1}{2}a = \frac{1}{2}\left(a - \frac{4}{7}\right) \quad \{\frac{1}{2}\}$$

$$278) \quad \frac{1}{4}\left(-\frac{2}{5}p + 1\right) = \frac{3}{8}p - \frac{17}{8} \quad \{5\}$$

$$280) \quad -\frac{81}{1372} - 1\frac{5}{8}n = -\frac{3}{7}\left(-\frac{15}{7}n + 1\frac{5}{6}\right) \quad \{\frac{2}{7}\}$$

$$282) \quad \frac{2281}{3360} + 1\frac{1}{8}m = 1\frac{1}{7}\left(\frac{9}{5}m - \frac{5}{6}\right) \quad \{1\frac{3}{4}\}$$

$$284) \quad -\frac{5}{7}x - 1\frac{1}{49} = -1\frac{5}{7}\left(\frac{1}{4}x + 1\right) \quad \{2\frac{3}{7}\}$$

$$286) \quad \frac{17}{4}\left(b + \frac{26}{5}\right) = -1\frac{1}{3}b + \frac{2103}{80} \quad \{\frac{3}{4}\}$$

$$288) \quad -\frac{7}{9} + 3\left(-2\frac{8}{9}x + \frac{1}{2}\right) = -40\frac{5}{18} + 1\frac{1}{3}x \quad \{4\frac{1}{10}\}$$

$$289) \quad 9n + 29 \frac{3}{5} = 1 \frac{5}{6} \left(-\frac{1}{2}n + 1 \right) \quad \left\{ -2 \frac{4}{5} \right\}$$

$$291) \quad \frac{1}{5}a - \frac{7}{5} \left(-2 \frac{1}{3}a + \frac{2}{5} \right) = 6a - 8 \frac{119}{150} \quad \left\{ 3 \frac{1}{4} \right\}$$

$$293) \quad 11 \frac{13}{140} - \frac{1}{7}x = 3 \frac{1}{2} \left(x + 1 \frac{2}{5} \right) \quad \left\{ 1 \frac{7}{10} \right\}$$

$$295) \quad -\frac{2}{7}p + 6 \frac{109}{448} = \frac{5}{8} \left(-1 \frac{1}{7}p + 5 \frac{7}{8} \right) \quad \left\{ -6 \right\}$$

$$297) \quad \frac{5}{9} \left(-\frac{17}{6}x + \frac{5}{2} \right) = 20 \frac{19}{45} + 9x \quad \left\{ -1 \frac{4}{5} \right\}$$

$$299) \quad -\frac{17}{405} - 1 \frac{3}{5}n = -2 \frac{1}{9} \left(\frac{1}{2}n + \frac{1}{9} \right) + \frac{5}{9} \quad \left\{ -\frac{2}{3} \right\}$$

$$301) \quad -1 \frac{1}{4} \left(x + \frac{3}{4} \right) = \frac{7}{6}x + 7 \frac{61}{80} \quad \left\{ -3 \frac{3}{5} \right\}$$

$$303) \quad 15 \frac{1}{28} - \frac{1}{2}v = \frac{1}{2} \left(4 \frac{4}{7}v + 1 \frac{1}{10} \right) \quad \left\{ 5 \frac{1}{5} \right\}$$

$$305) \quad 1 \frac{3}{4}b + 5 \frac{8357}{9072} = -2 \frac{3}{7}b - 1 \frac{1}{9} \left(5 \frac{5}{9}b - 3 \right) \quad \left\{ -\frac{1}{4} \right\}$$

$$307) \quad -\frac{457}{700} - 1 \frac{2}{5}k = -\frac{1}{8} \left(k + \frac{8}{7} \right) \quad \left\{ -\frac{2}{5} \right\}$$

$$309) \quad -8 \frac{1}{30} + \frac{4}{5}a = -2a + 1 \frac{1}{6} \left(4 \frac{4}{9}a + 1 \right) \quad \left\{ -3 \frac{6}{7} \right\}$$

$$311) \quad 16 \frac{2}{3} + \frac{5}{6}n = -1 \frac{2}{3} \left(-\frac{1}{2}n - 10 \right) \quad \{ \text{All real numbers} \}$$

$$313) \quad -2 \frac{1}{3} \left(\frac{17}{3}r + \frac{13}{8} \right) = -3 \frac{9}{10}r - \frac{18671}{720} \quad \left\{ 2 \frac{3}{8} \right\}$$

$$315) \quad -1 \frac{1}{3}n - \frac{79}{144} = -1 \frac{1}{2} \left(n + \frac{5}{8} \right) + \frac{1}{2} \quad \left\{ \frac{2}{3} \right\}$$

$$317) \quad -1 \frac{99}{700} + \frac{2}{7}x = -\frac{2}{5} \left(\frac{7}{8}x + 1 \frac{9}{10} \right) \quad \left\{ \frac{3}{5} \right\}$$

$$319) \quad \frac{1}{5} \left(1 \frac{3}{5}a + \frac{1}{6} \right) = 3 \frac{449}{1050} + 3 \frac{5}{7}a \quad \left\{ -1 \right\}$$

$$321) \quad \frac{1}{2}v + 3 \frac{3}{7} = -\left(-\frac{3}{2}v + 1 \right) \quad \left\{ 4 \frac{3}{7} \right\}$$

$$323) \quad 1 \frac{1}{10} \left(n + 2 \frac{1}{4} \right) = -15 \frac{61}{120} + 5 \frac{1}{4}n \quad \left\{ 4 \frac{1}{3} \right\}$$

$$325) \quad -\frac{109}{10} + \frac{4}{7}k = -1 \frac{2}{7} \left(1 \frac{1}{2}k + \frac{7}{10} \right) \quad \left\{ 4 \right\}$$

$$327) \quad n + \frac{551}{315} = \frac{2}{7} \left(-1 \frac{7}{9}n + 1 \frac{9}{10} \right) \quad \left\{ -\frac{4}{5} \right\}$$

$$329) \quad -\frac{1007}{120} + 3 \frac{1}{4}m = -\frac{5}{3} \left(-\frac{7}{2}m + 1 \right) + \frac{1}{4} \quad \left\{ -2 \frac{7}{10} \right\}$$

$$290) \quad -5 \frac{4}{5} - \frac{1}{5}v = \frac{4}{3}v + 2 \left(v - \frac{29}{10} \right) \quad \left\{ 0 \right\}$$

$$292) \quad 2 \left(x - 1 \frac{1}{2} \right) = -\frac{29}{10} + 1 \frac{9}{10}x \quad \left\{ 1 \right\}$$

$$294) \quad \frac{3}{7} \left(n + 1 \frac{2}{3} \right) = \frac{19}{28} + \frac{1}{2}n \quad \left\{ \frac{1}{2} \right\}$$

$$296) \quad 5 \frac{1}{3} \left(1 \frac{2}{3}k + 2 \right) - \frac{7}{4} = 12 \frac{127}{288} + 3 \frac{1}{4}k \quad \left\{ \frac{5}{8} \right\}$$

$$298) \quad \frac{1}{2}m + 1 \frac{17}{72} = 2 \frac{3}{8} \left(1 \frac{8}{9}m + 1 \right) \quad \left\{ -\frac{2}{7} \right\}$$

$$300) \quad 1 \frac{2}{9}r + 2 \left(\frac{31}{7}r + 1 \right) = 6 \frac{1549}{1764} + 3 \frac{1}{4}r \quad \left\{ \frac{5}{7} \right\}$$

$$302) \quad -2 \frac{1}{2}n - 10 \frac{8}{15} = \frac{2}{9} \left(n + 1 \frac{1}{5} \right) - 1 \quad \left\{ -3 \frac{3}{5} \right\}$$

$$304) \quad \frac{1}{2} \left(-1 \frac{1}{2}n + 1 \right) = -15 \frac{7}{16} + 3n \quad \left\{ 4 \frac{1}{4} \right\}$$

$$306) \quad \frac{29}{5} \left(-x + \frac{1}{2} \right) - \frac{1}{2}x = 12 \frac{13}{45} - \frac{2}{3}x \quad \left\{ -1 \frac{2}{3} \right\}$$

$$308) \quad \frac{24}{7} + \frac{1}{5}p = 1 \frac{2}{3} \left(p - 1 \frac{5}{7} \right) \quad \left\{ 4 \frac{2}{7} \right\}$$

$$310) \quad -1 \frac{4}{9}x + \frac{2}{7} \left(\frac{10}{3}x + 1 \frac{7}{10} \right) = 7 \frac{29}{2835} - 1 \frac{3}{5}x \quad \left\{ 5 \frac{8}{9} \right\}$$

$$312) \quad -1 \frac{3}{8}m - \frac{11}{25} = -\frac{17}{10} \left(\frac{4}{5}m + \frac{1}{4} \right) \quad \left\{ -1 \right\}$$

$$314) \quad \frac{46}{9} \left(x - 2 \frac{1}{10} \right) + 1 = -3 \frac{29}{810} - 3 \frac{1}{2}x \quad \left\{ \frac{7}{9} \right\}$$

$$316) \quad \frac{9}{5} \left(b + 5 \frac{1}{5} \right) = 13 \frac{32}{75} - 1 \frac{1}{4}b \quad \left\{ 1 \frac{1}{3} \right\}$$

$$318) \quad 2 + 4 \frac{2}{9} \left(\frac{5}{3}v + 1 \right) = \frac{8266}{189} + 3 \frac{2}{7}v \quad \left\{ 10 \right\}$$

$$320) \quad \frac{40}{7} \left(-1 \frac{3}{7}n + \frac{3}{7} \right) = -\frac{249}{35} + 1 \frac{2}{5}n \quad \left\{ 1 \right\}$$

$$322) \quad \frac{12}{7} \left(x - \frac{17}{6} \right) = -\frac{704}{245} - \frac{3}{5}x \quad \left\{ \frac{6}{7} \right\}$$

$$324) \quad 3 \frac{3}{4} \left(-\frac{2}{9}x + 1 \right) + \frac{3}{7} = \frac{821}{168} + 2x \quad \left\{ -\frac{1}{4} \right\}$$

$$326) \quad -\frac{27}{8} \left(-1 \frac{1}{4}p - 2 \right) = -\frac{1}{9}p + \frac{2543}{192} \quad \left\{ 1 \frac{1}{2} \right\}$$

$$328) \quad -\frac{35}{72} - \frac{1}{3}x = \frac{1}{3} \left(3 \frac{5}{6}x - 3 \right) - \frac{3}{2} \quad \left\{ 1 \frac{1}{4} \right\}$$

$$330) \quad 1 \frac{3}{5}r + \frac{3}{8} \left(r - 2 \frac{8}{9} \right) = -2 \frac{67}{300} + 1 \frac{1}{2}r \quad \left\{ -2 \frac{2}{5} \right\}$$

$$331) \quad 2\frac{1}{4}\left(x - 1\frac{2}{3}\right) = -1\frac{1}{8} + 1\frac{4}{5}x \quad \left\{\frac{5}{6}\right\}$$

$$333) \quad -1\frac{1}{10}\left(\frac{16}{5}b + 5\frac{3}{10}\right) = -11\frac{461}{700} - 2\frac{1}{2}b \quad \left\{\frac{5}{7}\right\}$$

$$335) \quad -1\frac{1}{2}\left(n - 1\frac{1}{3}\right) = 1\frac{3}{5}n - 11\frac{13}{30} \quad \left\{\frac{4}{3}\right\}$$

$$337) \quad \frac{1}{2}\left(a + \frac{4}{5}\right) + 3\frac{1}{3}a = -5\frac{9}{10}a - 24\frac{22}{35} \quad \left\{-2\frac{4}{7}\right\}$$

$$339) \quad 27\frac{25}{168} - \frac{2}{3}x = 1\frac{1}{2}\left(\frac{17}{4}x + \frac{4}{3}\right) \quad \left\{\frac{3}{7}\right\}$$

$$341) \quad 3\frac{103}{168} + 2\frac{1}{7}n = -\frac{1}{6} + 1\frac{1}{2}\left(\frac{2}{3}n + \frac{5}{4}\right) \quad \left\{-1\frac{2}{3}\right\}$$

$$343) \quad -\frac{5}{9}x + 9\frac{191}{720} = -1\frac{1}{8}\left(5\frac{1}{2}x + 1\right) - 2 \quad \left\{-2\frac{1}{5}\right\}$$

$$345) \quad 4\frac{3}{10}\left(n + 5\frac{7}{8}\right) = \frac{1769}{80} - 2n \quad \left\{-\frac{1}{2}\right\}$$

$$347) \quad \frac{1}{2}\left(v + \frac{12}{7}\right) = 14\frac{71}{140} - 5\frac{4}{5}v \quad \left\{2\frac{1}{6}\right\}$$

$$349) \quad \frac{1}{2}\left(4n + \frac{3}{5}\right) + \frac{43}{9}n = -\frac{17}{180} + 5\frac{1}{5}n \quad \left\{-\frac{1}{4}\right\}$$

$$351) \quad -\frac{5}{4} - 1\frac{7}{8}\left(1\frac{1}{2}v + 1\right) = -9\frac{5}{32} - \frac{2}{5}v \quad \left\{2\frac{1}{2}\right\}$$

$$353) \quad -3\frac{2}{3}\left(x + 3\frac{3}{8}\right) = \frac{1}{12} + \frac{2}{3}x \quad \left\{-2\frac{7}{8}\right\}$$

$$355) \quad -2\frac{5}{8}k + \frac{687}{80} = \frac{1}{6}\left(4\frac{1}{3}k + 5\frac{1}{3}\right) \quad \left\{2\frac{3}{10}\right\}$$

$$357) \quad 5\frac{4}{9}x - 5\frac{559}{720} = \frac{19}{6}\left(2x - 1\frac{3}{8}\right) \quad \left\{-1\frac{3}{5}\right\}$$

$$359) \quad 3\frac{3}{10}\left(3\frac{7}{9}r + 1\right) = -8r - 27\frac{2}{5} \quad \left\{-1\frac{1}{2}\right\}$$

$$361) \quad 2\frac{175}{192} - x = -3\frac{5}{8}\left(4\frac{3}{4}x + 1\right) + 3\frac{5}{6} \quad \left\{-\frac{1}{6}\right\}$$

$$363) \quad -\frac{443}{270} + 4\frac{5}{6}x = \frac{4}{9}\left(-3\frac{1}{3}x + 4\frac{5}{6}\right) \quad \left\{\frac{3}{5}\right\}$$

$$365) \quad -20\frac{19}{72} - 2\frac{5}{6}b = 5\frac{5}{6}\left(-1\frac{1}{2}b - 1\frac{1}{2}\right) - \frac{2}{3} \quad \left\{1\frac{5}{6}\right\}$$

$$367) \quad -\frac{1}{4}\left(p + \frac{1}{6}\right) = -\frac{4}{7}p - 1\frac{109}{168} \quad \left\{-5\right\}$$

$$369) \quad 4\left(a + 1\frac{2}{5}\right) = 18\frac{16}{35} + \frac{8}{7}a \quad \left\{4\frac{1}{2}\right\}$$

$$371) \quad -\frac{1119}{392} - 2m = -1\frac{2}{7}\left(1\frac{3}{8}m + \frac{19}{8}\right) \quad \left\{\frac{6}{7}\right\}$$

$$332) \quad -6\frac{187}{324} - \frac{1}{3}n = -1\frac{2}{3}\left(\frac{2}{3}n + 1\right) - \frac{11}{4} \quad \left\{2\frac{7}{9}\right\}$$

$$334) \quad 4\frac{1}{6} + 1\frac{2}{5}\left(-2\frac{3}{7}v - 1\frac{1}{2}\right) = 1\frac{5}{9}v + 13\frac{124}{315} \quad \left\{-2\frac{2}{7}\right\}$$

$$336) \quad -2\frac{9}{10}\left(-1\frac{3}{5}x + 1\frac{1}{10}\right) = -\frac{1153}{100} - 3\frac{7}{10}x \quad \left\{-1\right\}$$

$$338) \quad 2\frac{30}{49} + 4\frac{3}{5}k = \frac{25}{7}\left(k + 1\frac{1}{7}\right) \quad \left\{1\frac{3}{7}\right\}$$

$$340) \quad -\frac{1093}{210} + 5\frac{1}{3}p = -1\frac{3}{10} + 1\frac{3}{7}\left(5\frac{3}{5}p + 1\right) \quad \left\{-2\right\}$$

$$342) \quad 2\frac{1}{2}m + 4\frac{1067}{1680} = \frac{1}{5}\left(-\frac{4}{7}m - \frac{4}{3}\right) \quad \left\{-1\frac{7}{8}\right\}$$

$$344) \quad -\frac{4}{3}\left(\frac{15}{8}r + 1\frac{1}{4}\right) = -4\frac{14}{27} - \frac{2}{3}r \quad \left\{1\frac{5}{9}\right\}$$

$$346) \quad 2\frac{5}{6}b + \frac{173}{216} = 6 - 1\frac{1}{4}\left(b + \frac{1}{6}\right) \quad \left\{1\frac{2}{9}\right\}$$

$$348) \quad \frac{59}{120} + 1\frac{1}{5}x = \frac{21}{8}\left(2x - \frac{5}{3}\right) + \frac{13}{4}x \quad \left\{\frac{2}{3}\right\}$$

$$350) \quad 3\frac{2}{9}\left(-1\frac{3}{10}a + 1\frac{1}{6}\right) = 1\frac{1}{6}a + 10\frac{247}{810} \quad \left\{-1\frac{2}{9}\right\}$$

$$352) \quad 3\frac{3}{140} + 2x = -\frac{1}{2}\left(x + 1\frac{1}{10}\right) \quad \left\{-1\frac{3}{7}\right\}$$

$$354) \quad -5\frac{103}{175} + 2n = -\frac{6}{5}\left(-\frac{3}{5}n + 1\right) \quad \left\{3\frac{3}{7}\right\}$$

$$356) \quad \frac{1}{2}\left(1\frac{8}{9}p - \frac{5}{9}\right) + 7 = 9\frac{89}{90} + \frac{2}{5}p \quad \left\{6\right\}$$

$$358) \quad -\frac{24}{5} + 4\frac{3}{5}m = -\frac{1}{2}\left(m + \frac{9}{2}\right) \quad \left\{\frac{1}{2}\right\}$$

$$360) \quad -1\frac{6}{7}\left(\frac{4}{5}n - \frac{2}{7}\right) = 9\frac{111}{196} + 1\frac{4}{5}n \quad \left\{-2\frac{3}{4}\right\}$$

$$362) \quad -22\frac{2}{5} - 7n = -\frac{17}{2}\left(n + 4\frac{2}{5}\right) \quad \left\{-10\right\}$$

$$364) \quad -2\frac{5}{8}\left(\frac{1}{3}v + \frac{7}{10}\right) + 4\frac{1}{9}v = -3\frac{1829}{5040} + 5\frac{1}{7}v \quad \left\{\frac{4}{5}\right\}$$

$$366) \quad -\frac{5}{8}\left(\frac{2}{3}x - \frac{11}{4}\right) = 1\frac{3}{5}x + 5\frac{197}{1120} \quad \left\{-1\frac{5}{7}\right\}$$

$$368) \quad -13\frac{1}{18} + 5\frac{4}{5}x = -2\frac{4}{5}\left(\frac{2}{3}x + 3\frac{3}{4}\right) \quad \left\{\frac{1}{3}\right\}$$

$$370) \quad -\frac{13}{10}\left(k + \frac{19}{4}\right) + 3\frac{4}{7} = -\frac{201}{1400} + 2\frac{4}{5}k \quad \left\{-\frac{3}{5}\right\}$$

$$372) \quad \frac{5}{9}\left(x + 1\frac{2}{3}\right) = \frac{4}{5}x + 1\frac{278}{405} \quad \left\{-3\frac{1}{9}\right\}$$

- 373) $16\frac{313}{360} + 3\frac{5}{6}n = \frac{17}{4}\left(-\frac{5}{3}n - \frac{9}{10}\right) - \frac{3}{2}n$ $\left\{-1\frac{2}{3}\right\}$ 374) $1\frac{13}{72} - 3\frac{3}{4}r = -1\frac{1}{3}\left(\frac{13}{6}r + 1\frac{3}{4}\right) + \frac{1}{2}$ $\left\{3\frac{1}{2}\right\}$
 375) $38\frac{139}{960} - 1\frac{1}{8}v = 3\frac{1}{6}\left(\frac{9}{5}v + 1\right)$ $\left\{5\frac{1}{8}\right\}$ 376) $2\frac{1}{12} + 6n = 4\frac{1}{2} + 1\frac{2}{3}\left(n + \frac{57}{10}\right)$ $\left\{2\frac{3}{4}\right\}$
 377) $\frac{2}{3}\left(-1\frac{5}{9}b + 1\right) - \frac{1}{3}b = -\frac{104}{27} + \frac{8}{9}b$ $\left\{2\right\}$ 378) $\frac{17}{10}x - 3\frac{1}{9}\left(-\frac{5}{2}x + \frac{1}{2}\right) = 27\frac{161}{270} + 4\frac{1}{3}x$ $\left\{5\frac{2}{3}\right\}$
 379) $-\frac{1037}{504} + 3\frac{1}{7}n = -1\frac{1}{4}\left(\frac{16}{9}n - \frac{1}{2}\right)$ $\left\{\frac{1}{2}\right\}$ 380) $2\frac{5}{9}\left(\frac{2}{7}a + \frac{3}{4}\right) - \frac{1}{7} = 9a + 31\frac{403}{2268}$ $\left\{-3\frac{5}{9}\right\}$
 381) $6\left(3\frac{1}{2}x + 1\right) = 34\frac{17}{50} - \frac{4}{5}x$ $\left\{1\frac{3}{10}\right\}$ 382) $3\frac{5}{7} - 2\frac{1}{5}\left(x + 3\frac{5}{9}\right) = -3\frac{7}{9}x - 1\frac{362}{2835}$ $\left\{1\frac{8}{9}\right\}$
 383) $-20\frac{445}{567} + 6\frac{3}{10}n = \frac{31}{9}\left(n - 1\frac{3}{7}\right)$ $\left\{5\frac{5}{9}\right\}$ 384) $-\frac{3077}{5040} - \frac{6}{7}k = -\frac{2}{5}\left(3\frac{1}{4}k + 1\frac{1}{9}\right)$ $\left\{\frac{3}{8}\right\}$
 385) $8\left(-2\frac{1}{3}k + 1\frac{1}{2}\right) = 25\frac{1}{3} + 8k$ $\left\{-\frac{1}{2}\right\}$ 386) $\frac{17}{6}\left(2p + 1\frac{4}{7}\right) = 17\frac{11}{14} - p$ $\left\{2\right\}$
 387) $\frac{11}{6}\left(-\frac{1}{3}x + 1\frac{2}{9}\right) + 1\frac{4}{5}x = -1\frac{3}{8}x - 2\frac{479}{540}$ $\left\{-2\right\}$ 388) $-1\frac{4}{5}\left(7n + 2\frac{1}{6}\right) - \frac{5}{8}n = -43\frac{259}{320} - 1\frac{2}{5}n$ $\left\{3\frac{3}{8}\right\}$
 389) $1\frac{2}{3}m - \frac{49}{72} = -3\frac{5}{6}\left(m - \frac{7}{3}\right)$ $\left\{1\frac{3}{4}\right\}$ 390) $-\frac{1}{16} - \frac{1}{2}x = -\frac{1}{2}\left(x + \frac{1}{8}\right)$ { All real numbers. }
 391) $-\frac{2243}{60} - 1\frac{1}{2}r = -7\frac{1}{6}\left(r + 4\frac{1}{10}\right) - \frac{1}{3}r$ $\left\{1\frac{1}{3}\right\}$ 392) $\frac{527}{168} + 3b = 3\frac{4}{7}\left(-\frac{1}{4}b + \frac{1}{3}\right)$ $\left\{-\frac{1}{2}\right\}$
 393) $1\frac{3}{7}x + \frac{3}{5}\left(2x - \frac{5}{3}\right) = -10x - 1$ $\left\{0\right\}$ 394) $\frac{1}{2}\left(-\frac{1}{10}v + \frac{1}{8}\right) = \frac{3}{10}v - \frac{19}{144}$ $\left\{\frac{5}{9}\right\}$
 395) $-\frac{1}{2}n + \frac{881}{25} = -3\frac{1}{2}\left(4\frac{2}{5}n + 1\right)$ $\left\{-2\frac{3}{5}\right\}$ 396) $\frac{2}{7}\left(\frac{1}{5}x - 2\frac{5}{6}\right) = 2x + \frac{17}{7}$ $\left\{-1\frac{2}{3}\right\}$
 397) $-3a + \frac{56}{15} = -\frac{1}{5}\left(a - \frac{2}{3}\right)$ $\left\{1\frac{2}{7}\right\}$ 398) $\frac{7}{8}k + 30\frac{1}{4} = -\frac{13}{4}\left(-1\frac{3}{10}k + 1\right)$ $\left\{10\right\}$
 399) $\frac{1}{10}\left(4\frac{1}{6}p + 1\right) = 2\frac{307}{420} - p$ $\left\{1\frac{6}{7}\right\}$ 400) $-1\frac{1}{9} + \frac{28}{5}\left(-\frac{1}{2}x + 9\frac{7}{10}\right) = x + \frac{50459}{1575}$ $\left\{5\frac{4}{7}\right\}$
 401) $-1\frac{2}{3}\left(\frac{3}{4}n + \frac{41}{12}\right) = 7\frac{3}{4}n - 4\frac{347}{396}$ $\left\{-\frac{1}{11}\right\}$ 402) $-\frac{2}{5}m - 12\frac{689}{1260} = \frac{5}{3}\left(31\frac{1}{6}m + 5\frac{13}{14}\right) + \frac{1}{10}$ $\left\{-2\frac{1}{2}\right\}$
 403) $1\frac{1}{12} - \frac{1}{4}\left(3\frac{2}{9}r - 1\frac{1}{3}\right) = -\frac{5}{42} - 2r$ $\left\{-1\frac{2}{7}\right\}$ 404) $-1\frac{11}{13}\left(-3\frac{5}{14}x + 1\right) = -\frac{1}{3}x + 19\frac{2686}{3549}$ $\left\{3\frac{4}{13}\right\}$
 405) $-17\frac{95827}{120120} + 5\frac{4}{11}x = 6\frac{13}{14}\left(\frac{3}{5}x - 1\frac{7}{13}\right)$ $\left\{5\frac{11}{12}\right\}$ 406) $-\frac{79}{154} - 1\frac{6}{7}b = -\frac{17}{11}\left(b + 1\frac{3}{10}\right)$ $\left\{4\frac{4}{5}\right\}$
 407) $-\frac{1}{7}n - 2\frac{1}{3}\left(n + \frac{47}{12}\right) = -9\frac{5}{36} + 7\frac{2}{9}n$ $\left\{0\right\}$ 408) $-5\frac{9}{28} + 5\frac{4}{5}v = \frac{17}{3}\left(v - \frac{4}{7}\right) - 1\frac{1}{4}$ $\left\{6\frac{1}{4}\right\}$
 409) $\frac{461837}{66066} + 7\frac{5}{13}n = 6\frac{1}{7}n + 1\frac{6}{11}\left(1\frac{1}{2}n + 4\frac{1}{3}\right)$ $\left\{\frac{3}{11}\right\}$ 411) $-1\frac{3}{4}x - 2\frac{1}{2}\left(x + \frac{1}{4}\right) = -\frac{153}{5} + 1\frac{1}{5}x$ $\left\{5\frac{1}{2}\right\}$
 410) $-8\frac{147}{208} - \frac{1}{4}a = \frac{5}{4} + 6\frac{1}{14}\left(1\frac{3}{5}a - \frac{1}{8}\right)$ $\left\{-\frac{12}{13}\right\}$ 413) $16\frac{11}{12} + n = 2\left(2\frac{2}{9}n + 1\right) + \frac{43}{6}$ $\left\{2\frac{1}{4}\right\}$
 412) $5\frac{5}{8}\left(-\frac{1}{2}x + 1\right) = -2x + 1\frac{5}{32}$ $\left\{5\frac{1}{2}\right\}$

$$\begin{array}{ll}
414) \frac{133}{40} + 7\frac{1}{6}k = 1\frac{13}{14}\left(6\frac{1}{2}k + 5\frac{9}{10}\right) \left\{-1\frac{1}{2}\right\} & 415) 2\frac{7}{11}p + 2\frac{49}{2178} = -\frac{1}{2}\left(2p + 3\frac{8}{9}\right) \left\{-1\frac{1}{11}\right\} \\
416) -\frac{458}{63} + 1\frac{1}{2}m = -1\frac{8}{9}\left(m + \frac{79}{14}\right) \left\{-1\right\} & 417) -\frac{35}{3}\left(\frac{1}{3}n + \frac{17}{11}\right) = -\frac{1}{4}n - \frac{42775}{2772} \left\{-\frac{5}{7}\right\} \\
418) -1\frac{1}{5} + 2\frac{2}{5}\left(\frac{11}{6}x - 1\frac{5}{7}\right) = -8\frac{307}{420} + 1\frac{2}{3}x \left\{-1\frac{1}{4}\right\} & 419) -\frac{5}{3}r - \frac{2321}{96} = 4\frac{1}{3}\left(-\frac{17}{12}r + 1\right) \left\{6\frac{3}{8}\right\} \\
420) -\frac{29}{8} - \frac{3}{11}\left(n + 4\frac{1}{2}\right) = -9\frac{183}{1144} + n \left\{3\frac{5}{13}\right\} & 421) -11\frac{71}{78} + 7\frac{1}{3}x = \frac{3}{13}\left(\frac{11}{4}x + 1\right) - 2\frac{4}{7} \left\{1\frac{3}{7}\right\} \\
422) 4\frac{1}{5}b + \frac{105436}{17745} = -\frac{8}{13}\left(1\frac{10}{13}b + \frac{1}{6}\right) \left\{-1\frac{1}{7}\right\} & 423) -\frac{3}{13}\left(1\frac{5}{12}x + 5\frac{5}{8}\right) = -\frac{5355}{208} + 6\frac{11}{12}x \left\{3\frac{3}{8}\right\} \\
424) -7\frac{2357}{6930} + 1\frac{1}{3}v = \frac{38}{9}\left(\frac{2}{5}v - \frac{15}{11}\right) - 1\frac{1}{10} \left\{-1\frac{5}{14}\right\} & 425) 9\left(-\frac{5}{4}x + 2\right) = \frac{119}{9} + 3\frac{1}{12}x \left\{\frac{1}{3}\right\} \\
426) 9\frac{49}{52} + 6\frac{1}{8}a = \frac{12}{13}\left(a - \frac{1}{2}\right) \left\{-2\right\} & 427) -\frac{3}{4}\left(k - 2\frac{1}{2}\right) = -3\frac{93}{196} + 7\frac{4}{7}k \left\{\frac{9}{14}\right\} \\
428) -3\frac{3}{10}p + 3\frac{1}{10}\left(p - 1\frac{1}{6}\right) = -3\frac{323}{660} - \frac{4}{11}p \left\{\frac{7}{9}\right\} & 429) -15\frac{13}{18} - 1\frac{5}{6}x = 6\frac{1}{4}\left(x - 1\frac{2}{9}\right) \left\{-1\right\} \\
430) -67\frac{31}{32} - n = -\frac{3}{4}\left(8n + \frac{65}{8}\right) \left\{12\frac{3}{8}\right\} & 431) -\frac{3523}{154} + \frac{1}{2}r = -\frac{1}{3}\left(8r + 3\frac{6}{7}\right) \left\{6\frac{9}{11}\right\} \\
432) -7\frac{1}{10}\left(-2\frac{5}{9}m + \frac{16}{5}\right) = -54\frac{1753}{3150} + 9\frac{13}{14}m \left\{-3\frac{7}{8}\right\} & 433) \frac{3}{10}\left(-1\frac{4}{7}n + 1\right) = 17\frac{317}{455} + 1\frac{6}{13}n \left\{-9\right\} \\
434) -2x - 7\frac{1381}{3960} = -\frac{20}{11} - \frac{5}{8}\left(x + \frac{44}{9}\right) \left\{-1\frac{4}{5}\right\} & 435) 5\frac{4}{7}\left(-1\frac{1}{2}b + 1\right) + \frac{15}{11}b = -6\frac{111}{1001} + \frac{3}{5}b \left\{1\frac{7}{13}\right\} \\
436) -\frac{4}{7}\left(4\frac{1}{2}v + 1\right) + \frac{29}{14}v = 1\frac{47}{175} + 1\frac{4}{5}v \left\{-\frac{4}{5}\right\} & 437) -\frac{7563}{455} + 4\frac{1}{14}x = -\frac{7}{4}\left(\frac{33}{13}x + \frac{12}{7}\right) \left\{1\frac{3}{5}\right\} \\
438) -7\frac{63}{104} + \frac{1}{13}n = -3\frac{2}{5}\left(1\frac{3}{5}n + 1\frac{3}{8}\right) + \frac{5}{3} \left\{\frac{5}{6}\right\} & 439) -\frac{3}{5}\left(-\frac{1}{8}a - 1\frac{9}{13}\right) = 6\frac{7}{8}a + 4\frac{383}{390} \left\{-\frac{7}{12}\right\} \\
440) -12\frac{5}{8}\left(-\frac{79}{6}k + \frac{41}{14}\right) = -36\frac{109}{112} - \frac{1}{2}k \left\{0\right\} & 441) 4\frac{8}{9}k - 37\frac{1285}{1512} = 6\frac{2}{7} + \frac{25}{6}\left(-9k + \frac{3}{7}\right) \left\{1\frac{1}{12}\right\} \\
442) 2\frac{141}{364} + \frac{3}{8}x = 2\left(-\frac{15}{14}x + 1\right) \left\{-\frac{2}{13}\right\} & 443) -24\frac{3}{10} + 1\frac{2}{5}x = 6\frac{1}{7}\left(-\frac{9}{4}x + 1\right) \left\{2\right\} \\
444) \frac{2349}{715} + \frac{10}{11}m = -\frac{7}{13}\left(m - \frac{9}{5}\right) \left\{-1\frac{3}{5}\right\} & 445) 5\frac{11}{42} + 4\frac{1}{6}n = 6\frac{5}{6}\left(n - \frac{11}{7}\right) - \frac{8}{9} \left\{6\frac{1}{3}\right\} \\
446) -\left(-2x + \frac{102}{13}\right) = -7\frac{30}{143} + 1\frac{8}{9}x \left\{5\frac{8}{11}\right\} & 447) \frac{1}{6}\left(1\frac{2}{5}p + \frac{1}{3}\right) + 5\frac{9}{13}p = \frac{2}{13}p + \frac{1132}{117} \left\{1\frac{2}{3}\right\} \\
448) 2\frac{1}{7}\left(-\frac{13}{6}n + \frac{18}{11}\right) + 6\frac{5}{6}n = -10\frac{4}{231} + \frac{1}{2}n \left\{-8\right\} & 449) -1\frac{11}{12}\left(r - 1\frac{5}{6}\right) = -22\frac{35}{72} + \frac{3}{4}r \left\{9\frac{3}{4}\right\} \\
450) \frac{15}{4}x + \frac{1}{13}\left(x + 7\frac{1}{4}\right) = -\frac{3649}{468} + 4\frac{11}{12}x \left\{7\frac{2}{3}\right\} & 451) \frac{3}{4}m - \frac{649}{1701} = \frac{2}{3}\left(\frac{8}{9}m - \frac{26}{7}\right) + 1\frac{1}{2} \left\{-3\frac{7}{9}\right\} \\
452) -27\frac{17}{26} - \frac{7}{8}n = 13\left(n + \frac{1}{2}\right) \left\{-2\frac{6}{13}\right\} & \\
453) \frac{6}{5}b - \frac{37}{12}\left(4\frac{3}{7}b - 1\frac{9}{13}\right) = -39\frac{69967}{131040} + 3\frac{1}{9}b \left\{2\frac{7}{8}\right\} &
\end{array}$$

$$454) -\frac{229}{396} - \frac{5}{4}x = 4\frac{1}{4}\left(\frac{1}{3}x - 1\frac{2}{11}\right) \quad \left\{1\frac{2}{3}\right\}$$

$$456) -10\frac{206}{385} + \frac{1}{5}x = \frac{2}{11}x - 1\frac{1}{5}\left(1\frac{1}{14}x - 1\right) \quad \{9\}$$

$$458) \frac{92}{21} - \frac{1}{5}p = \frac{8}{5}\left(-1\frac{3}{7}p + 1\right) \quad \left\{-1\frac{1}{3}\right\}$$

$$460) \frac{43}{6}\left(\frac{77}{12}a + 1\right) = 18\frac{283}{728} - 2\frac{9}{14}a \quad \left\{\frac{3}{13}\right\}$$

$$462) -\frac{32349}{728} - 1\frac{1}{8}m = -\frac{5}{2}\left(1\frac{8}{13}m + 7\frac{2}{7}\right) \quad \{9\}$$

$$464) 1\frac{1}{6}\left(2\frac{2}{3}x + \frac{4}{9}\right) = \frac{14}{27} + 3\frac{9}{13}x \quad \{0\}$$

$$466) -\frac{151}{24} - 1\frac{1}{6}b = -\frac{7}{2}\left(b + 1\frac{3}{4}\right) \quad \left\{\frac{1}{14}\right\}$$

$$468) -\frac{1}{13}n + 19\frac{243}{260} = \frac{9}{14}\left(3\frac{3}{4}n + 1\frac{3}{5}\right) \quad \left\{7\frac{3}{5}\right\}$$

$$470) -64\frac{411}{4160} - 2\frac{7}{10}x = \frac{1}{13}x - 3\frac{5}{8}\left(2x + \frac{23}{8}\right) \quad \{12\}$$

$$472) -1\frac{4}{11}x - 1\frac{193}{792} = -1\frac{1}{4}\left(x + \frac{8}{9}\right) \quad \left\{-1\frac{1}{6}\right\}$$

$$474) -2\left(6\frac{2}{7}n + 1\right) = -9\frac{13}{15} - 1\frac{1}{3}n \quad \left\{\frac{7}{10}\right\}$$

$$476) \frac{3077}{495} - \frac{10}{9}m = \frac{14}{11}m + 5\frac{3}{8}\left(-\frac{3}{5}m + 1\right) \quad \{-1\}$$

$$478) 6\frac{1}{7} - 3\frac{3}{8}m = \frac{1}{2}\left(1\frac{5}{7}m + 1\right) \quad \left\{1\frac{1}{3}\right\}$$

$$480) -18\frac{157}{168} + 7\frac{7}{11}x = 5\frac{1}{12}\left(\frac{1}{2}x + 1\right) \quad \left\{4\frac{5}{7}\right\}$$

$$482) -\frac{1}{4}\left(n - \frac{8}{5}\right) + \frac{91}{12} = 2\frac{17}{30} + n \quad \left\{4\frac{1}{3}\right\}$$

$$484) 5\frac{191}{539} + 2b = 2\left(6\frac{2}{7}b + 2\right) - 1\frac{12}{11}b \quad \left\{\frac{1}{7}\right\}$$

$$486) -2\frac{1497}{1694} - \frac{15}{14}x = -4x + \frac{10}{11}\left(-\frac{4}{7}x + 2\right) \quad \left\{1\frac{4}{11}\right\}$$

$$488) -11\frac{23}{110} - \frac{3}{7}a = -\frac{1}{8}\left(3\frac{9}{11}a - 1\frac{5}{14}\right) - 3\frac{7}{8}a \quad \left\{2\frac{9}{10}\right\}$$

$$490) -5\frac{29}{156} + 4\frac{8}{13}x = -\frac{1}{3}\left(\frac{53}{12}x + 1\right) - 2x \quad \left\{\frac{3}{5}\right\}$$

$$492) -3\frac{1}{2}\left(7\frac{5}{6}r - 3\frac{5}{6}\right) = -67\frac{41}{132} + \frac{1}{3}r \quad \left\{2\frac{10}{11}\right\}$$

$$494) -5b + 13\frac{3}{7} = \frac{7}{2}\left(-\frac{37}{12}b + 1\right) \quad \left\{-1\frac{5}{7}\right\}$$

$$455) \frac{3}{13}\left(3\frac{4}{13}v + 4\frac{9}{10}\right) = -2\frac{11}{13}v - \frac{11621}{2535} \quad \left\{-1\frac{7}{12}\right\}$$

$$457) -\frac{7}{4}\left(7\frac{7}{9}k + 1\right) = -3\frac{3}{8}k - 9\frac{31}{504} \quad \left\{\frac{5}{7}\right\}$$

$$459) -\frac{1665}{112} + 4\frac{7}{8}x = 2\left(x + 1\frac{1}{2}\right) \quad \left\{6\frac{3}{14}\right\}$$

$$461) \frac{1}{2}\left(1\frac{1}{2}n + \frac{1}{6}\right) + 3\frac{5}{6}n = -1\frac{3}{8}n - 7\frac{1}{15} \quad \left\{-1\frac{1}{5}\right\}$$

$$463) -\frac{5}{4}r + \frac{94}{231} = \frac{2}{7} + \frac{8}{11}\left(1\frac{7}{11}r + \frac{1}{6}\right) \quad \{0\}$$

$$465) \frac{3}{8}\left(\frac{4}{5}n + 1\right) = 1\frac{2}{9}n + 2\frac{727}{1800} \quad \left\{-2\frac{1}{5}\right\}$$

$$467) -v + 42\frac{2}{5} = \frac{28}{5}\left(v + 7\frac{1}{10}\right) \quad \left\{\frac{2}{5}\right\}$$

$$469) \frac{2}{7} + 1\frac{5}{8}\left(a + 14\frac{2}{3}\right) = 23\frac{121}{840} + 3\frac{1}{4}a \quad \left\{\frac{3}{5}\right\}$$

$$471) -8\left(1\frac{7}{11}x - 2\frac{1}{6}\right) = 10x + \frac{5780}{99} \quad \left\{-1\frac{7}{9}\right\}$$

$$473) -1\frac{4}{7}k + 2\frac{2}{13}\left(\frac{23}{14}k + \frac{69}{14}\right) = \frac{14150}{819} - 1\frac{2}{3}k \quad \left\{1\frac{5}{6}\right\}$$

$$475) -\frac{3077}{880} + 1\frac{3}{11}x = -\left(1\frac{1}{8}x + \frac{20}{11}\right) \quad \left\{\frac{7}{10}\right\}$$

$$477) -1\frac{3}{4}p - 3\frac{421}{1248} = \frac{21}{8}\left(-1\frac{1}{2}p + 1\frac{12}{13}\right) \quad \left\{3\frac{5}{6}\right\}$$

$$479) \frac{39}{5}\left(\frac{1}{3}n - \frac{3}{5}\right) - \frac{10}{11}n = -\frac{5}{9}n - \frac{62549}{7425} \quad \left\{-1\frac{2}{3}\right\}$$

$$481) -1\frac{2}{7}r + 4\frac{1}{13}\left(-2\frac{9}{14}r + 1\right) = \frac{6}{7}r + \frac{5815}{273} \quad \left\{-1\frac{1}{3}\right\}$$

$$483) 5\frac{1}{4}\left(1\frac{4}{5}v + \frac{1}{4}\right) = 16\frac{653}{720} - 3\frac{11}{12}v \quad \left\{1\frac{1}{6}\right\}$$

$$485) -12\frac{63}{65} + 13x = 6\frac{10}{13}\left(14x + \frac{1}{2}\right) \quad \left\{-\frac{1}{5}\right\}$$

$$487) 8\frac{19}{45} + 3\frac{1}{3}k = \frac{4}{5}\left(k + 5\frac{7}{9}\right) \quad \left\{-1\frac{1}{2}\right\}$$

$$489) 5\frac{2}{5}\left(p + 1\frac{1}{2}\right) = 20\frac{3}{5} - \frac{11}{10}p \quad \left\{1\frac{12}{13}\right\}$$

$$491) -\frac{2}{5}\left(\frac{20}{3}m + \frac{1}{8}\right) = \frac{1}{10}m - \frac{2923}{360} \quad \left\{2\frac{11}{12}\right\}$$

$$493) 18\frac{51}{56} - \frac{3}{2}n = 7\frac{1}{4}\left(-\frac{15}{14}n + \frac{33}{10}\right) \quad \left\{\frac{4}{5}\right\}$$

$$495) -\frac{5}{6}x + 2\left(\frac{2}{3}x + \frac{16}{3}\right) = \frac{169}{15} + 1\frac{1}{10}x \quad \{-1\}$$

$$496) \quad 4\frac{3}{8} + \frac{1}{2}\left(1\frac{3}{5}n + \frac{11}{14}\right) = \frac{1861}{3080} + 5\frac{8}{9}n \quad \left\{\frac{9}{11}\right\}$$

$$497) \quad -1\frac{4}{7}\left(v + \frac{3}{10}\right) - \frac{3}{2}v = -v + 26\frac{16}{35} \quad \{-13\}$$

$$498) \quad \frac{173}{26} - \frac{1}{2}x = 2\left(5x - 1\frac{12}{13}\right) \quad \{1\}$$

$$499) \quad -1\frac{6}{11}\left(10\frac{3}{11}a + 2\frac{1}{2}\right) = \frac{112789}{6050} + \frac{1}{5}a \quad \left\{-1\frac{2}{5}\right\}$$

$$500) \quad -\frac{7805}{216} - 1\frac{5}{9}n = 3\frac{1}{2}\left(2n - 2\frac{7}{12}\right) \quad \left\{-3\frac{1}{6}\right\}$$

$$501) \quad \frac{1}{2}x - 1\frac{5}{13}x = -1\frac{5}{11}\left(1\frac{7}{10}x + \frac{11}{9}\right) - \frac{1}{2}\left(-\frac{9}{7}x + \frac{5}{6}\right) \quad \left\{-2\frac{54763}{170316}\right\}$$

$$502) \quad k + 1\frac{2}{3}\left(\frac{10}{9}k + \frac{23}{10}\right) = 14\left(\frac{40}{9}k + 9\right) - \frac{46}{13} \quad \left\{-1\frac{41599}{41678}\right\} \quad 503) \quad 7\frac{1}{4}\left(-2\frac{3}{5}m + \frac{10}{9}\right) = -1\frac{1}{2}\left(m + \frac{11}{4}\right) - 2m \quad \left\{\frac{4385}{5526}\right\}$$

$$504) \quad -1\frac{6}{7}\left(n + \frac{4}{3}\right) = -3\frac{2}{3}\left(2\frac{4}{5}n + \frac{77}{12}\right) \quad \left\{-2\frac{5333}{10596}\right\} \quad 505) \quad -1\frac{3}{14}\left(\frac{3}{4}x + \frac{44}{13}\right) = 2\frac{1}{8}x + \frac{3}{5}\left(1\frac{9}{10}x + 1\frac{1}{3}\right) \quad \left\{-1\frac{6681}{37999}\right\}$$

$$506) \quad 5\frac{2}{9}\left(\frac{18}{13}p - 2\frac{1}{7}\right) + 1\frac{5}{7} = -p + 13\left(2\frac{7}{12}p + 1\right) \quad \left\{-\frac{24544}{27685}\right\}$$

$$507) \quad \frac{19}{10}\left(1\frac{1}{4}n + 1\frac{3}{7}\right) = -1 - \left(2\frac{1}{2}n + 1\right) \quad \left\{-\frac{88}{91}\right\}$$

$$508) \quad b + 7\frac{8}{13} + 3\frac{1}{2}b = \frac{1}{2}\left(4\frac{3}{5}b + \frac{13}{11}\right) + 2\frac{2}{3}\left(\frac{1}{3}b + 12\right) \quad \left\{19\frac{829}{16874}\right\}$$

$$509) \quad -1\frac{2}{3}\left(\frac{9}{10}x - \frac{5}{2}\right) - \frac{2}{5}x = -\left(x - 2\frac{9}{14}\right) \quad \left\{1\frac{131}{189}\right\}$$

$$510) \quad 3\frac{4}{7}x + \frac{13}{14} + x - \frac{47}{14} = -9\left(x + 5\frac{1}{2}\right) + \frac{25}{13}\left(-\frac{3}{8}x + 1\frac{1}{8}\right) \quad \left\{-3\frac{1478}{10405}\right\}$$

$$511) \quad -\frac{3}{14}\left(r + 1\frac{1}{2}\right) = -\frac{5}{4} - \frac{3}{7}\left(r + \frac{5}{2}\right) \quad \left\{-9\frac{1}{3}\right\}$$

$$512) \quad -1\frac{3}{14}\left(2\frac{1}{11}n + 1\frac{5}{7}\right) + \frac{37}{5}n = 5\frac{3}{7}n + \frac{2}{3}\left(3\frac{7}{10}n + \frac{4}{7}\right) \quad \left\{-\frac{39820}{49063}\right\}$$

$$513) \quad -\frac{9}{11}\left(4\frac{1}{4}x + 1\right) - 1 = 7\frac{3}{7}\left(-2x - \frac{12}{7}\right) \quad \left\{-\frac{23536}{24535}\right\}$$

$$514) \quad \frac{1}{5}v - \frac{11}{13}v = 2\left(7\frac{4}{9}v + 1\right) + 1\frac{1}{2}\left(2\frac{3}{10}v + 1\frac{7}{13}\right) \quad \left\{-\frac{2016}{8885}\right\}$$

$$515) \quad \frac{1}{2}\left(\frac{10}{13}b + 7\frac{7}{9}\right) + \frac{1}{8}b = 1\frac{3}{7} + 2\frac{7}{12}\left(5\frac{1}{2}b + 6\frac{5}{12}\right) \quad \left\{-1\frac{1823}{59836}\right\}$$

$$516) \quad -\frac{6}{7} + \frac{7}{4}\left(\frac{7}{13}x + \frac{2}{3}\right) = -\frac{18}{13}\left(\frac{3}{7}x + \frac{19}{14}\right) \quad \left\{-1\frac{713}{1677}\right\} \quad 517) \quad a - \frac{13}{4}\left(6\frac{1}{2}a - 10\right) = -\frac{8}{11}\left(\frac{7}{4}a - \frac{1}{4}\right) \quad \left\{1\frac{5}{7}\right\}$$

$$518) \quad -1\frac{2}{11}k + \frac{1}{3}\left(-\frac{5}{3}k + \frac{77}{10}\right) = -1\frac{1}{4}\left(k - 1\frac{2}{9}\right) - \frac{19}{14}k \quad \left\{-1\frac{2344}{12055}\right\}$$

$$519) \quad -\left(-\frac{5}{4}x - \frac{6}{11}\right) = 7\frac{9}{14}\left(-\frac{9}{5}x + 1\right) \quad \left\{\frac{10930}{23111}\right\} \quad 520) \quad -\left(\frac{4}{13}p + 1\frac{1}{2}\right) + \frac{30}{7}\left(p - \frac{4}{3}\right) = 1\frac{1}{2}p + \frac{3}{4}p \quad \left\{4\frac{110}{629}\right\}$$

$$521) \quad \frac{1}{2}\left(1\frac{1}{2}m + 1\right) = \frac{8}{9}m - 2\left(\frac{11}{14}m + 1\frac{1}{2}\right) \quad \left\{-2\frac{160}{361}\right\}$$

$$522) \quad 4\frac{2}{3}n - \frac{6}{13} + \frac{7}{2}n = 5\frac{1}{3}\left(n + \frac{7}{13}\right) + \frac{19}{4}\left(-1\frac{7}{10}n - \frac{5}{6}\right) \quad \left\{-\frac{75}{1309}\right\}$$

$$523) \frac{34}{7} \left(5 \frac{7}{10}x + 1 \frac{4}{7} \right) = -1 \frac{1}{3} + \frac{112}{9} \left(x + \frac{3}{2} \right) \quad \left\{ \frac{21390}{33607} \right\} \quad 524) \frac{3}{4}r + \frac{17}{6} \left(\frac{62}{11}r + 2 \right) = \frac{95}{14} \left(\frac{2}{7}r + 1 \right) + 6 \frac{2}{11} \quad \left\{ \frac{47222}{95603} \right\}$$

$$525) -\frac{20}{7} \left(3 \frac{2}{11}n - \frac{2}{3} \right) = -1 \frac{1}{4} + 1 \frac{2}{5} \left(\frac{26}{9}n - \frac{19}{11} \right) \quad \left\{ \frac{77241}{182056} \right\}$$

$$526) 2b + 2 \frac{1}{2} + 3 \frac{5}{13} = \frac{94}{13} \left(b - \frac{1}{2} \right) - 1 \frac{1}{3} \left(4 \frac{1}{7}b + 5 \frac{3}{10} \right) \quad \left\{ -56 \frac{427}{800} \right\}$$

$$527) -13 \frac{1}{2} \left(v - \frac{1}{4} \right) = 3 \frac{10}{13} \left(-\frac{1}{2}v + \frac{67}{12} \right) \quad \left\{ -1 \frac{1889}{3624} \right\}$$

$$528) -\frac{1}{10} \left(\frac{5}{13}x - 3 \frac{4}{11} \right) + 1 \frac{3}{4} = -\frac{9}{10} \left(-\frac{1}{3}x + 8 \right) + \frac{2}{3}x \quad \left\{ 9 \frac{2061}{8624} \right\}$$

$$529) -\left(\frac{5}{8}k + 1 \right) = \frac{1}{2} \left(k - \frac{3}{4} \right) \quad \left\{ -\frac{5}{9} \right\}$$

$$530) -1 \frac{3}{8}n + 3 \frac{1}{7} \left(1 \frac{3}{7}n + 1 \frac{1}{6} \right) = 1 \frac{7}{8} \left(\frac{5}{12}n + 1 \right) \quad \left\{ -\frac{8428}{10977} \right\}$$

$$531) -1 \frac{9}{13} \left(-\frac{3}{7}a + 1 \right) + \frac{99}{14}a = -\frac{1}{11} \left(2 \frac{3}{7}a + 7 \frac{1}{6} \right) \quad \left\{ \frac{893}{6879} \right\} \quad 532) 6 \frac{1}{12} \left(4 \frac{1}{14}x + 1 \frac{1}{4} \right) = 1 \frac{1}{2} \left(\frac{21}{8}x - 1 \frac{1}{3} \right) \quad \left\{ -\frac{3227}{6999} \right\}$$

$$533) -\frac{5}{4} \left(x + 1 \frac{3}{7} \right) = -3 \frac{7}{10} \left(4 \frac{1}{3}x - 1 \right) \quad \left\{ \frac{2304}{6209} \right\} \quad 534) 1 \frac{3}{8}n - \frac{10}{13} \left(n + \frac{1}{9} \right) = -1 \frac{2}{3}n + 1 \frac{9}{14} \left(n + 7 \frac{5}{6} \right) \quad \left\{ 20 \frac{2378}{4125} \right\}$$

$$535) -\frac{11}{5} + 1 \frac{1}{4} \left(-3 \frac{1}{5}p + \frac{1}{5} \right) = \frac{9}{14} \left(5 \frac{3}{4}p + \frac{13}{4} \right) \quad \left\{ -\frac{1131}{2155} \right\}$$

$$536) -2 \frac{1}{3} - \frac{3}{13} \left(m + 1 \frac{5}{11} \right) = 3 \frac{5}{14}m - 2 \left(\frac{34}{5}m + \frac{1}{3} \right) \quad \left\{ \frac{60130}{300663} \right\}$$

$$537) 2 \frac{4}{5} \left(-10 \frac{5}{12}x + \frac{31}{6} \right) = \frac{3}{4}x + \frac{3}{5} \left(\frac{7}{9}x + \frac{19}{10} \right) \quad \left\{ \frac{3998}{9115} \right\} \quad 538) 1 \frac{1}{3} \left(-3 \frac{3}{14}n + 1 \right) = 1 \frac{1}{5} \left(-6n + \frac{5}{13} \right) \quad \left\{ -\frac{35}{117} \right\}$$

$$539) \frac{8}{7}b + 1 \frac{1}{4} \left(\frac{3}{7}b - \frac{1}{5} \right) = 2 - \frac{2}{3} \left(5 \frac{5}{14}b + 1 \right) \quad \left\{ \frac{19}{63} \right\}$$

$$540) -\frac{1}{10} \left(-1 \frac{4}{7}x - \frac{8}{13} \right) - \frac{10}{7} \left(-1 \frac{1}{2}x - \frac{2}{3} \right) = \frac{79}{12}x + 1 + 1 \frac{3}{8} \quad \left\{ -\frac{14863}{46774} \right\}$$

$$541) \frac{21}{11}r + \frac{2}{3} \left(-\frac{25}{7}r + 5 \frac{3}{13} \right) = -1 \frac{1}{6} \left(1 \frac{5}{8}r - 5 \frac{5}{6} \right) + \frac{4}{3}r \quad \left\{ 36 \frac{7984}{13065} \right\}$$

$$542) -1 \frac{4}{11} \left(\frac{4}{7}n + 1 \frac{3}{4} \right) = -1 \frac{1}{8} \left(\frac{1}{3}n + \frac{23}{11} \right) \quad \left\{ -\frac{7}{83} \right\}$$

$$543) \frac{7}{8} \left(-\frac{27}{8}a + 1 \right) + 2 \frac{1}{4} \left(4 \frac{1}{2}a - 1 \right) = a - 1 \frac{3}{8} - \frac{1}{2}a + 1 \quad \left\{ \frac{64}{427} \right\}$$

$$544) -2 \frac{2}{9} \left(v + \frac{3}{7} \right) + 6 \frac{7}{10} = \frac{1}{13} \left(1 \frac{3}{5}v - 10 \right) \quad \left\{ 2 \frac{14957}{19208} \right\} \quad 545) 2 \frac{1}{11} \left(\frac{49}{8}x + \frac{61}{13} \right) + 3 \frac{1}{6} = -2 \frac{3}{8} \left(6 \frac{2}{3}x + 1 \frac{1}{6} \right) \quad \left\{ -\frac{108099}{196586} \right\}$$

$$546) \frac{41}{10}x + \frac{12}{11} \left(-1 \frac{3}{4}x + 2 \frac{1}{6} \right) = \frac{7}{5} \left(\frac{3}{2}x + 1 \right) \quad \left\{ -10 \frac{3}{5} \right\} \quad 547) 6 \left(-\frac{1}{3}a + 1 \right) + \frac{3}{14} = \frac{4}{5} \left(a + \frac{7}{8} \right) - \frac{1}{2}a \quad \left\{ 2 \frac{64}{161} \right\}$$

$$548) 2 \left(\frac{3}{8}p + 5 \frac{5}{13} \right) + 2 \frac{1}{2} = 3 \frac{4}{5} \left(\frac{17}{3}p + \frac{1}{2} \right) \quad \left\{ \frac{8868}{16211} \right\} \quad 549) -\frac{29}{9} \left(\frac{5}{3}x + 1 \right) = 1 \frac{2}{7} - \frac{8}{5} \left(x + \frac{43}{10} \right) \quad \left\{ \frac{11208}{17815} \right\}$$

$$550) 4 \frac{5}{6} \left(k - \frac{1}{4} \right) + \frac{3}{7} \left(1 \frac{1}{2}k + 2 \right) = 5 \frac{3}{10}k + 1 \frac{4}{13} + 1 \frac{3}{13}k + 1 \frac{10}{13} \quad \left\{ -3 \frac{2887}{11516} \right\}$$

$$551) -\frac{2}{3} \left(1 \frac{4}{11}n + 1 \right) + \frac{5}{13}n = \frac{4}{5} \left(-1 \frac{3}{4}n + \frac{43}{8} \right) \quad \left\{ 5 \frac{2527}{3756} \right\} \quad 552) 3 \frac{2}{3} \left(1 \frac{4}{5}m + 1 \right) = -2 \frac{5}{13} \left(-\frac{21}{11}m - 3 \frac{5}{14} \right) - \frac{3}{2} \quad \left\{ 1 \frac{11881}{30744} \right\}$$

$$553) \frac{15}{2} \left(x + \frac{5}{8} \right) = -\frac{6}{7} \left(1 \frac{9}{11} x + 1 \frac{10}{13} \right) \left\{ -\frac{33121}{48360} \right\}$$

$$554) r + 1 \frac{1}{2} + \frac{9}{2} r + 11 \frac{4}{11} = \frac{37}{9} \left(5 \frac{3}{4} r + 1 \frac{1}{2} \right) - 3 \frac{7}{9} \left(1 \frac{8}{13} r - 2 \frac{5}{12} \right) \left\{ -\frac{37570}{185889} \right\}$$

$$555) -\frac{4}{5} n + 2 + n + \frac{3}{8} = 7 \frac{5}{6} \left(2 \frac{6}{7} n + 1 \right) + 3 \frac{2}{7} \left(\frac{115}{9} n - \frac{4}{3} \right) \left\{ -\frac{2715}{161696} \right\}$$

$$556) 5 \frac{3}{5} - \frac{25}{9} \left(\frac{35}{6} b + \frac{16}{9} \right) = 3 \frac{7}{9} b + 7 \frac{1}{2} \left(b + \frac{44}{7} \right) \left\{ -1 \frac{26932}{38955} \right\}$$

$$557) -14 \frac{1}{2} + \frac{7}{10} \left(1 \frac{3}{10} v + \frac{77}{10} \right) = \frac{6}{7} v - 14 \left(v + 2 \frac{1}{8} \right) \left\{ -1 \frac{1537}{3279} \right\}$$

$$558) 7 \frac{11}{12} - 6 \left(\frac{25}{4} x - 14 \right) = -2 \frac{1}{12} \left(1 \frac{7}{9} x + \frac{23}{6} \right) \left\{ 2 \frac{6979}{7300} \right\} 559) -11 \left(-\frac{2}{5} n + 1 \right) = -\frac{3}{2} \left(3 \frac{11}{14} n + \frac{15}{2} \right) \left\{ -\frac{35}{1411} \right\}$$

$$560) -3 \frac{1}{4} \left(3 \frac{5}{7} a + 1 \frac{7}{13} \right) - 3 \frac{8}{11} \left(1 \frac{4}{5} a + 5 \frac{7}{8} \right) = 4 \frac{5}{6} a + \frac{27}{4} a \left\{ -\frac{248535}{280562} \right\}$$

$$561) \frac{17}{11} \left(x + 3 \frac{7}{9} \right) = -1 - 1 \frac{1}{2} \left(x - \frac{15}{4} \right) \left\{ -\frac{961}{2412} \right\} \quad 562) -1 \frac{2}{3} \left(3k + 5 \frac{3}{7} \right) = 2 \frac{2}{9} - 3 \frac{1}{5} \left(\frac{9}{13} k + 12 \right) \left\{ 9 \frac{8471}{11403} \right\}$$

$$563) 11 \frac{2}{5} \left(x + \frac{13}{10} \right) + \frac{3}{11} = -9 \frac{1}{2} x - 1 \frac{3}{4} \left(\frac{9}{7} x + \frac{1}{7} \right) \left\{ -\frac{16877}{25465} \right\} 3 \frac{2}{9} \left(\frac{37}{14} n + \frac{38}{5} \right) = 6 \frac{3}{4} \left(n + 4 \frac{1}{2} \right) \left\{ 3 \frac{1483}{4450} \right\}$$

$$565) -1 \frac{1}{5} \left(-2p + 1 \frac{9}{10} \right) = -2 \left(-\frac{7}{8} p + \frac{1}{2} \right) \left\{ 1 \frac{63}{65} \right\} \quad 566) 2 \frac{7}{11} \left(\frac{21}{4} m + 2 \frac{7}{11} \right) = 1 \frac{4}{5} \left(1 \frac{1}{4} m + 1 \frac{3}{10} \right) \left\{ -\frac{27893}{70125} \right\}$$

$$567) \frac{38}{13} \left(x + 2 \frac{3}{8} \right) + \frac{1}{5} x = -\frac{7}{12} + 4 \frac{1}{2} \left(\frac{1}{4} x + 1 \right) \left\{ -1 \frac{1603}{3117} \right\} 568) 7 \frac{5}{12} \left(n - \frac{2}{3} \right) + 4 \frac{5}{11} \left(1 \frac{1}{4} n + 7 \right) = 1 \frac{5}{6} n + \frac{1}{2} n \left\{ -2 \frac{977}{2109} \right\}$$

$$569) 6 \frac{3}{8} \left(\frac{47}{11} b - 1 \frac{1}{4} \right) - 1 \frac{5}{6} = \frac{9}{10} \left(\frac{13}{4} b + 5 \frac{3}{7} \right) \left\{ \frac{542861}{898632} \right\} 570) \frac{41}{12} \left(r + 5 \frac{3}{7} \right) - \frac{4}{5} r = -1 \frac{3}{13} \left(1 \frac{5}{14} r - \frac{11}{6} \right) \left\{ -3 \frac{18729}{23407} \right\}$$

$$571) \frac{1}{2} \left(4 \frac{3}{10} x + \frac{11}{12} \right) + \frac{1}{2} = -3 \frac{11}{12} \left(x + 1 \frac{1}{12} \right) \left\{ -\frac{535}{624} \right\} 572) 2 \left(\frac{1}{2} n + 1 \right) = 1 \frac{2}{7} n - \frac{13}{4} \left(1 \frac{2}{9} n - 2 \right) \left\{ 1 \frac{205}{929} \right\}$$

$$573) \frac{4}{5} \left(3 \frac{1}{13} v + 1 \right) = -9 \frac{1}{7} \left(\frac{14}{13} v - 1 \frac{3}{4} \right) \left\{ 1 \frac{47}{200} \right\} \quad 574) 3 \frac{4}{5} \left(-\frac{2}{3} a + \frac{3}{14} \right) = -3 \frac{1}{6} + 2 \left(-\frac{3}{10} a + \frac{63}{8} \right) \left\{ -6 \frac{71}{812} \right\}$$

$$575) -9 \left(-1 \frac{8}{9} x + 2 \frac{7}{12} \right) = \frac{39}{10} \left(x + 5 \frac{3}{14} \right) \left\{ 3 \frac{300}{917} \right\}$$

$$576) \frac{5}{7} \left(\frac{17}{10} x + 4 \frac{7}{8} \right) - \frac{27}{10} \left(3 \frac{3}{5} x + 4 \frac{11}{12} \right) = 5 \frac{1}{6} x - \frac{1}{7} x \left\{ -\frac{20565}{28412} \right\}$$

$$577) 7 \left(a - 5 \frac{4}{5} \right) - \frac{1}{5} a = -2 \frac{1}{3} \left(-1 \frac{9}{14} a - 1 \frac{5}{13} \right) \left\{ 14 \frac{896}{1157} \right\} 578) \frac{1}{2} \left(x - \frac{28}{9} \right) + \frac{4}{5} \left(x + \frac{1}{2} \right) = -7x - \frac{8}{3} x \left\{ \frac{104}{987} \right\}$$

$$579) -3 \frac{1}{2} \left(p - \frac{1}{9} \right) + 1 = \frac{3}{10} \left(\frac{1}{3} p + 1 \frac{1}{3} \right) + 1 \frac{2}{3} \left\{ -\frac{61}{324} \right\}$$

$$580) \frac{17}{8} \left(\frac{13}{14} k - \frac{29}{14} \right) + 3 \frac{3}{13} k = 7 \frac{3}{14} - 1 \frac{3}{14} \left(\frac{20}{7} k - \frac{1}{3} \right) \left\{ 1 \frac{102352}{265197} \right\}$$

$$581) \frac{12}{7} \left(\frac{31}{6} n + \frac{1}{2} \right) = 1 \frac{12}{13} \left(n + 1 \frac{9}{10} \right) \left\{ \frac{509}{1262} \right\}$$

$$582) -1 \frac{3}{14} r + \frac{9}{8} \left(2r + \frac{4}{5} \right) = \frac{10}{13} + 2 \frac{11}{14} \left(2 \frac{7}{12} r + 1 \right) \left\{ -\frac{9664}{22425} \right\}$$

$$583) 7\frac{1}{6}\left(1\frac{8}{9}n+1\right)+1\frac{3}{7}=1\frac{9}{11}\left(6\frac{1}{8}n+6\frac{5}{8}\right) \left\{1\frac{2182}{4991}\right\} 584) \frac{1}{7}\left(\frac{3}{5}x-\frac{7}{8}\right)-3\frac{1}{10}=-\left(\frac{13}{6}x+1\right)-4x \left\{\frac{1869}{5252}\right\}$$

$$585) \frac{13}{2}m+4\frac{11}{14}+\frac{6}{13}=3\frac{1}{6}\left(-2\frac{2}{3}m-1\frac{1}{3}\right)+\frac{7}{10}\left(3\frac{9}{10}m-1\frac{6}{13}\right) \left\{-\frac{859340}{1000363}\right\}$$

$$586) -3\frac{2}{7}\left(b+2\frac{1}{3}\right)+\frac{5}{8}=1\frac{1}{6}\left(b+\frac{1}{13}\right) \left\{-1\frac{5851}{9724}\right\} 587) -\frac{3}{4}x-\frac{9}{5}\left(5x+4\frac{1}{6}\right)=-\left(x-1\frac{1}{4}\right) \left\{-1\right\}$$

$$588) -7\left(n+\frac{5}{4}\right)=\frac{1}{2}\left(-1\frac{1}{2}n+2\frac{4}{11}\right)-3 \left\{-1\frac{6}{55}\right\}$$

$$589) 6\frac{4}{9}\left(7\frac{1}{6}v-\frac{16}{9}\right)+6\frac{5}{6}\left(\frac{1}{12}v-\frac{3}{2}\right)=\frac{3}{2}v+1\frac{1}{2}-1\frac{1}{3}v \left\{\frac{15038}{30189}\right\}$$

$$590) \frac{2}{5}\left(-\frac{1}{2}k-\frac{11}{4}\right)=-2\frac{13}{14}\left(1\frac{1}{3}k+1\right) \left\{-\frac{192}{389}\right\} 591) 2\frac{3}{4}\left(\frac{1}{3}a+\frac{7}{11}\right)+\frac{2}{3}=\frac{25}{6}\left(2\frac{5}{8}a+\frac{9}{4}\right) \left\{-\frac{334}{481}\right\}$$

$$592) \frac{19}{9}\left(-4\frac{7}{13}x+\frac{10}{11}\right)=\frac{5}{6}\left(x+\frac{12}{13}\right) \left\{\frac{2960}{26807}\right\} 593) 1\frac{6}{11}\left(\frac{6}{7}x+\frac{39}{11}\right)=\frac{1}{4}\left(-3\frac{5}{6}x+\frac{3}{2}\right) \left\{-2\frac{10943}{46409}\right\}$$

$$594) \frac{49}{9}\left(3\frac{1}{3}p+1\right)=12+5\frac{9}{10}\left(\frac{1}{8}p+1\right) \left\{\frac{26904}{37607}\right\} 595) 6\frac{2}{7}-\frac{13}{14}\left(m-1\frac{5}{9}\right)=\frac{36}{7}+3\frac{2}{3}\left(m+3\frac{1}{9}\right) \left\{-1\frac{1597}{1737}\right\}$$

$$596) -\frac{4}{11}\left(\frac{1}{2}x+\frac{16}{5}\right)=1\frac{2}{3}\left(x+2\frac{1}{6}\right) \left\{-2\frac{1067}{1830}\right\}$$

$$597) n+6\frac{1}{2}+\frac{29}{4}n+\frac{2}{3}=-1\frac{9}{10}\left(\frac{1}{8}n-2\frac{11}{13}\right)-2\left(\frac{81}{11}n-2\right) \left\{\frac{76912}{796731}\right\}$$

$$598) -\frac{1}{12}\left(-2n+5\frac{7}{9}\right)+\frac{63}{8}n=1\frac{8}{9}\left(-5n+\frac{17}{3}\right)+1\frac{2}{7}n \left\{\frac{16912}{24495}\right\}$$

$$599) -\frac{8}{3}b+\frac{5}{12}\left(\frac{5}{6}b+1\right)=4\frac{2}{5}+1\frac{5}{9}\left(\frac{3}{2}b+2\right) \left\{-1\frac{879}{1675}\right\} 600) -1\frac{3}{7}\left(\frac{97}{14}r-\frac{1}{2}\right)+\frac{1}{8}r=\frac{1}{4}\left(r-1\frac{1}{6}\right)+\frac{3}{8}r \left\{\frac{1183}{12228}\right\}$$

$$601) -\frac{7}{6}+15\frac{8}{35}\left(\frac{15}{23}m+\frac{8}{19}\right)=\frac{23}{22}+\frac{25}{36}\left(-\frac{6}{7}m-24\right) \left\{-1\frac{10437577}{10626605}\right\}$$

$$602) \frac{7}{3}\left(1\frac{1}{35}x-2\right)+19\frac{29}{31}=1\frac{19}{21}\left(\frac{62}{21}x-\frac{2}{3}\right) \left\{5\frac{7190}{55087}\right\} 603) -\frac{2}{7}\left(\frac{45}{19}n+17\frac{1}{8}\right)=14\frac{7}{19}\left(1\frac{9}{11}n+\frac{119}{9}\right) \left\{-7\frac{127591}{470520}\right\}$$

$$604) \frac{641}{37}n+14\frac{17}{19}n=-\frac{53}{19}\left(n-\frac{37}{24}\right)+\frac{2}{7}\left(\frac{5}{9}n+\frac{164}{31}\right) \left\{\frac{63836655}{382778824}\right\}$$

$$605) -\frac{3}{23}\left(\frac{8}{27}r+1\frac{1}{3}\right)-\frac{22}{25}r=9\frac{27}{37}+9\frac{6}{25}\left(1\frac{1}{5}r-2\right) \left\{\frac{4105395}{5747432}\right\}$$

$$606) -\frac{13}{27}-1\frac{11}{24}\left(-\frac{69}{35}b+\frac{184}{17}\right)=15\frac{1}{27}\left(15\frac{5}{24}b+34\right) \left\{-2\frac{836098}{2487559}\right\}$$

$$607) 17\frac{6}{7}\left(\frac{555}{31}v+8\frac{1}{6}\right)=25\left(1\frac{2}{17}v-\frac{19}{20}\right) \left\{-\frac{1501423}{2583120}\right\} 608) 20\frac{23}{29}\left(x+10\frac{4}{9}\right)=\frac{1}{4}\left(2x+\frac{82}{31}\right)+2x \left\{-11\frac{27486}{32891}\right\}$$

$$609) 1\frac{2}{9}\left(n-\frac{5}{13}\right)-\frac{18}{23}n=\frac{4}{5}\left(1\frac{5}{6}n+15\frac{4}{5}\right)+12\frac{4}{5}n \left\{-\frac{881981}{930215}\right\}$$

$$610) \frac{386}{27}\left(a+\frac{20}{27}\right)=24a-\frac{2}{19}\left(a-\frac{11}{32}\right) \left\{1\frac{211693}{2127168}\right\} 611) -\frac{17}{18}\left(10\frac{26}{33}k+9\frac{31}{35}\right)=\frac{235}{26}\left(-1\frac{16}{17}k-\frac{5}{14}\right) \left\{\frac{56131977}{67602010}\right\}$$

$$612) -38\left(-2\frac{8}{27}p+6\frac{5}{9}\right)=-\frac{1}{2}p+17\frac{5}{19}\left(\frac{125}{38}p+1\right) \left\{8\frac{362468}{603779}\right\}$$

$$613) \quad 1\frac{12}{25}\left(\frac{23}{29}m - 1\frac{3}{16}\right) = -\frac{34}{35}\left(\frac{473}{37}m - 1\right) \quad \left\{ \frac{8198793}{40836784} \right\}$$

$$614) \quad 38\left(16\frac{3}{14}x + 15\frac{25}{26}\right) + 1\frac{13}{14}x = -1\frac{2}{3} + 20\frac{19}{36}\left(x + \frac{295}{16}\right) \quad \left\{ -\frac{12041225}{31320848} \right\}$$

$$615) \quad 1\frac{1}{2}\left(-\frac{9}{10}r + 1\frac{34}{35}\right) - \frac{7}{10}\left(9\frac{9}{22}r + 6\frac{5}{8}\right) = 30r + 2\frac{4}{5}r \quad \left\{ -\frac{10351}{250936} \right\}$$

$$616) \quad 1\frac{1}{2}\left(18\frac{21}{40}n + 5\frac{11}{13}\right) + 3\frac{4}{19}\left(-\frac{1}{9}n + 1\frac{1}{9}\right) = \frac{7}{16}n + \frac{545}{39} - 1\frac{4}{23}n - 1\frac{29}{31} \quad \left\{ \frac{9434140}{180842531} \right\}$$

$$617) \quad \frac{475}{24}\left(x + \frac{491}{39}\right) = \frac{30}{29}\left(1\frac{13}{14}x - \frac{13}{18}\right) \quad \left\{ -14\frac{29141}{676299} \right\} \quad 618) \quad 18\frac{1}{30}n - \frac{2}{5}\left(1\frac{2}{3}n + \frac{1}{3}\right) = -1\frac{1}{3}\left(\frac{33}{34}n + \frac{3}{14}\right) \quad \left\{ -\frac{544}{66619} \right\}$$

$$619) \quad -\frac{5}{13}r - \frac{31}{17}\left(1\frac{8}{11}r + 14\frac{7}{16}\right) = -\frac{38}{17}\left(15\frac{19}{26}r - \frac{1}{5}\right) \quad \left\{ \frac{5207059}{6151120} \right\}$$

$$620) \quad -\frac{7}{38}\left(2\frac{17}{18}x - \frac{2}{3}\right) + \frac{11}{19}\left(\frac{5}{11}x + \frac{13}{15}\right) = -\frac{34}{37}x - \frac{2}{7}x \quad \left\{ -\frac{553224}{819695} \right\}$$

$$621) \quad -1\frac{7}{19}\left(n - \frac{1}{20}\right) - 2\frac{16}{33} = -20\left(\frac{31}{37}n + 1\frac{1}{20}\right) \quad \left\{ -1\frac{741263}{3569940} \right\}$$

$$622) \quad 8\frac{33}{34} - \left(1\frac{32}{35}b + 6\frac{8}{9}\right) = 9\frac{9}{17}\left(12\frac{24}{31}b + \frac{9}{2}\right) - 1\frac{13}{20}b \quad \left\{ -\frac{27092450}{81007011} \right\}$$

$$623) \quad -\frac{5}{8}\left(1\frac{9}{20}x + \frac{10}{7}\right) - 18x = -\frac{1}{2}\left(x + \frac{37}{2}\right) \quad \left\{ \frac{1872}{4123} \right\}$$

$$624) \quad -20 + 9\frac{2}{5}\left(x + 5\frac{23}{26}\right) = -\frac{5}{21} + \frac{2}{15}\left(\frac{47}{10}x - 1\frac{5}{18}\right) \quad \left\{ -4\frac{77459}{1077804} \right\}$$

$$625) \quad -2\frac{5}{13} - 3\frac{28}{29}\left(-\frac{1}{4}v - 1\frac{5}{6}\right) = -\frac{14}{13}v + 1\frac{1}{5}\left(\frac{23}{16}v + \frac{1}{7}\right) \quad \left\{ -13\frac{79531}{108717} \right\}$$

$$626) \quad a - \frac{9}{5} + 10\frac{4}{5}a + 1\frac{25}{31} = 31\left(\frac{1}{16}a - \frac{3}{2}\right) + 1\frac{3}{5}\left(\frac{1}{6}a + 7\frac{5}{12}\right) \quad \left\{ -3\frac{43541}{71393} \right\}$$

$$627) \quad 9\frac{7}{13}\left(\frac{19}{24}n + 1\right) + 1\frac{7}{38} = -\left(37n + 1\frac{1}{8}\right) \quad \left\{ -\frac{70233}{264100} \right\}$$

$$628) \quad \frac{269}{33}\left(p - \frac{11}{30}\right) = 14\frac{5}{12}\left(\frac{261}{13}p + 9\frac{7}{33}\right) + 8\frac{8}{17}p \quad \left\{ -\frac{19807346}{42264595} \right\}$$

$$629) \quad -\frac{129}{40}k - \frac{2}{11}k = -\frac{3}{2}\left(k + \frac{646}{35}\right) + 1\frac{19}{31}\left(\frac{2}{3}k - \frac{8}{11}\right) \quad \left\{ 9\frac{578595}{854189} \right\}$$

$$630) \quad -\frac{17}{12}\left(x - \frac{31}{36}\right) + \frac{393}{22} = 1\frac{2}{5} - \frac{6}{7}\left(x + \frac{3}{4}\right) \quad \left\{ 32\frac{70127}{93060} \right\}$$

$$631) \quad \frac{488}{27} - 1\frac{11}{15}\left(18\frac{7}{12}n + \frac{11}{23}\right) = 11\frac{2}{3}\left(n + 1\frac{5}{13}\right) \quad \left\{ \frac{88096}{3542253} \right\}$$

$$632) \quad \frac{69}{8} - \frac{3}{4}\left(33m + 12\frac{2}{15}\right) = 1\frac{2}{9}\left(\frac{305}{18}m + 20\frac{18}{25}\right) \quad \left\{ -\frac{417951}{736450} \right\}$$

$$633) \quad \frac{31}{34}r - 1\frac{4}{7}r = 19\frac{9}{23}\left(1\frac{3}{13}r - \frac{817}{26}\right) + \frac{1}{3}\left(r + 15\frac{8}{31}\right) \quad \left\{ -1\frac{131491383}{164519945} \right\}$$

$$634) \quad -\frac{1}{14}x - 1\frac{17}{18}\left(6\frac{28}{39}x + 9\frac{7}{10}\right) = 38 + 17\frac{13}{20}\left(\frac{3}{4}x - 2\right) \quad \left\{ -\frac{4238052}{5183603} \right\}$$

$$635) -\frac{2}{13}n - \frac{1}{23} + 16\frac{21}{32} = 4\frac{13}{34}\left(-19\frac{2}{7}n + \frac{373}{34}\right) + 11\frac{11}{18}\left(9\frac{5}{36}n + 14\frac{11}{34}\right) \left\{ 3\frac{21726489}{86557588} \right\}$$

$$636) -4\frac{7}{27}\left(v + 11\frac{17}{36}\right) = \frac{14}{15}v + \frac{3}{2}\left(8\frac{5}{33}v + \frac{735}{38}\right) \left\{ -4\frac{594706}{1263861} \right\}$$

$$637) \frac{14}{15}\left(2b + 1\frac{1}{3}\right) + \frac{12}{23} = \frac{31}{3} - \frac{7}{20}\left(3\frac{1}{2}b + 6\frac{1}{12}\right) \left\{ 2\frac{4217}{51198} \right\}$$

$$638) 5\frac{4}{7}\left(-\frac{21}{20}x + \frac{8}{9}\right) + \frac{377}{18} = \frac{19}{30}\left(x + \frac{65}{4}\right) \left\{ 2\frac{6649}{16338} \right\} 639) 1\frac{6}{19}\left(\frac{343}{18}n + 7\frac{5}{23}\right) = \frac{47}{15}\left(\frac{123}{38}n + 19\frac{17}{31}\right) \left\{ 3\frac{2122089}{4551079} \right\}$$

$$640) -3\frac{21}{40}a + 1 + \frac{644}{31}a = \frac{307}{16}\left(a + \frac{77}{24}\right) + 23\left(a + 1\frac{2}{23}\right) \left\{ -3\frac{639541}{1484328} \right\}$$

$$641) \frac{299}{16}\left(k + \frac{9}{37}\right) + 4\frac{3}{10} = \frac{18}{37}\left(k - 1\frac{11}{40}\right) - 2k \left\{ -\frac{28019}{59795} \right\}$$

$$642) -\frac{7}{16}\left(18\frac{17}{24}p + 1\right) + \frac{31}{30}p = 12\frac{27}{40}\left(\frac{9}{23}p + \frac{134}{9}\right) + 2 \left\{ -15\frac{418813}{534837} \right\}$$

$$643) -\frac{1}{2}\left(-8n - \frac{3}{14}\right) = \frac{75}{8}\left(n - 1\frac{21}{25}\right) \left\{ 3\frac{69}{301} \right\}$$

$$644) -\frac{2}{3}x + 18\frac{9}{28}\left(x + \frac{537}{31}\right) = -1\frac{2}{25}\left(-33x + \frac{27}{22}\right) \left\{ 17\frac{9274090}{12879229} \right\}$$

$$645) \frac{4}{29}\left(11\frac{1}{4}m - \frac{13}{37}\right) + \frac{1}{3} = 15m - 1\frac{13}{21}\left(-28m + 14\frac{1}{6}\right) \left\{ \frac{784871}{1986789} \right\}$$

$$646) \frac{15}{16}r + 14\left(r - \frac{28}{39}\right) = -\frac{17}{19}\left(r + 7\frac{7}{11}\right) + \frac{485}{27} \left\{ 1\frac{6278911}{18582993} \right\}$$

$$647) \frac{219}{25} - 40\left(1\frac{3}{5}x - 1\right) = 2\frac{1}{3}x - \frac{3}{2}\left(1\frac{1}{6}x + 24\frac{7}{10}\right) \left\{ 1\frac{6368}{19375} \right\}$$

$$648) -2\frac{19}{26}\left(\frac{1}{7}b - \frac{8}{9}\right) = 1\frac{1}{4}\left(6\frac{1}{16}b + 1\right) \left\{ \frac{61712}{417663} \right\}$$

$$649) 20\frac{3}{22}\left(-34n + 1\frac{17}{19}\right) + 14\frac{11}{16}\left(n + 4\frac{4}{13}\right) = -1\frac{1}{3}n - \frac{26}{25} + 6\frac{1}{24} \left\{ -\frac{314369966}{2115013221} \right\}$$

$$650) -1\frac{7}{12}\left(-1\frac{10}{17}x + 1\right) = -1\frac{8}{15}\left(1\frac{1}{6}x + 11\frac{19}{29}\right) \left\{ -3\frac{299688}{381901} \right\}$$

$$651) -1\frac{27}{31}v + 5\frac{7}{18}\left(\frac{187}{12}v + 26\frac{37}{38}\right) = 6\frac{5}{39}\left(5\frac{13}{14}v + 1\right) \left\{ -3\frac{22076163}{529947601} \right\}$$

$$652) 1\frac{4}{39}\left(\frac{332}{35}n + 1\frac{11}{36}\right) - \frac{31}{39}n = 1\frac{25}{36} - 22\left(\frac{132}{23}n - 1\frac{20}{31}\right) \left\{ 2\frac{24445959}{33385618} \right\}$$

$$653) 18\frac{1}{2} + 9\frac{2}{21}\left(\frac{250}{21}v + \frac{202}{15}\right) = 10\frac{5}{37}\left(v - 1\frac{2}{17}\right) \left\{ -1\frac{150257557}{272233750} \right\}$$

$$654) 8\frac{3}{5}a - \frac{5}{6}\left(\frac{63}{34}a + 3\frac{28}{37}\right) = 1\frac{2}{3}a + 9\frac{5}{6}\left(a + \frac{42}{11}\right) \left\{ -9\frac{281891}{1844931} \right\}$$

$$655) 1\frac{1}{2}x + 4\frac{1}{4}x = 18\frac{8}{19}\left(\frac{3}{10}x + \frac{1}{2}\right) + 18\frac{16}{25}\left(x + 1\frac{25}{36}\right) \left\{ -2\frac{67756}{314919} \right\}$$

$$656) 1\frac{29}{30}k - 6\left(3\frac{1}{21}k + 1\right) = 13\frac{17}{19}\left(k + 1\frac{1}{2}\right) \left\{ -\frac{107100}{120553} \right\}$$

$$657) 13 \frac{3}{7} \left(\frac{9}{19}x - \frac{91}{34} \right) + \frac{1}{8}x = \frac{3}{5} \left(\frac{4}{19}x + 15 \frac{13}{24} \right) + \frac{1}{2}x \quad \left\{ 7 \frac{384286}{529941} \right\}$$

$$658) -\frac{16}{17} \left(p + \frac{2}{35} \right) = 7 \frac{9}{29} + \frac{177}{19} \left(p + \frac{119}{6} \right) \quad \left\{ -18 \frac{4918919}{6725390} \right\}$$

$$659) 2 \frac{7}{24} \left(n + 8 \frac{5}{33} \right) + 1 \frac{17}{39} = -\frac{13}{14} \left(\frac{13}{14}n - \frac{1}{4} \right) + \frac{4}{37}n \quad \left\{ -6 \frac{2731252}{5168631} \right\}$$

$$660) \frac{9}{22} \left(8 \frac{2}{35}n + 1 \frac{11}{23} \right) = \frac{203}{12} \left(-\frac{6}{17}n - \frac{31}{22} \right) \quad \left\{ -2 \frac{21346393}{33479076} \right\}$$

$$661) \frac{216}{25}m + 1 + \frac{56}{33}m = 13 \frac{29}{30} \left(17 \frac{13}{32}m + \frac{5}{6} \right) + \frac{111}{8} \left(m + 15 \frac{15}{28} \right) \quad \left\{ -\frac{250807150}{273480333} \right\}$$

$$662) -29 \left(x + 19 \frac{13}{15} \right) + 3 \frac{21}{26} \left(-1 \frac{13}{32}x + 15 \frac{15}{16} \right) = 18 \frac{13}{14}x + \frac{63}{34} + \frac{3}{13}x - \frac{23}{18} \quad \left\{ 8 \frac{88507478}{238423725} \right\}$$

$$663) \frac{287}{33}r + \frac{165}{28} \left(13 \frac{37}{39}r - 2 \right) = \frac{23}{24} \left(r + \frac{11}{21} \right) \quad \left\{ \frac{885599}{6481899} \right\}$$

$$664) 13 \frac{4}{17} \left(8 \frac{1}{6}x + \frac{16}{33} \right) + \frac{116}{11} = -\frac{23}{20} \left(-\frac{13}{22}x + \frac{7}{19} \right) + 20 \frac{11}{20} \quad \left\{ \frac{449632}{15264923} \right\}$$

$$665) -\frac{7}{9} \left(\frac{8}{27}b + 1 \right) = -\frac{32}{17} + 11 \frac{17}{28} \left(9 \frac{7}{9}b + \frac{29}{31} \right) \quad \left\{ -\frac{34973991}{4077757388} \right\} 8 \left(2n + \frac{184}{21} \right) = \frac{4}{39} \left(\frac{26}{15}n + \frac{1}{3} \right) + \frac{344}{29} \quad \left\{ -3 \frac{24379799}{35819147} \right\}$$

$$667) -1 \frac{13}{16}v + 15 \frac{14}{25} + \frac{3}{5}v + \frac{43}{24} = 1 \frac{2}{31} \left(28v + 16 \frac{1}{15} \right) + \frac{7}{9} \left(16 \frac{9}{13}v + 1 \right) \quad \left\{ -\frac{767962}{63837895} \right\}$$

$$668) \frac{93}{35} \left(x + \frac{17}{16} \right) - 2 \frac{24}{25}x = \frac{105}{22} \left(\frac{1}{5}x - 1 \frac{1}{7} \right) + 1 \frac{2}{21}x \quad \left\{ 3 \frac{112713}{217384} \right\}$$

$$669) -\frac{10}{11} - \frac{13}{12} \left(n - \frac{13}{18} \right) = \frac{17}{27} \left(n + \frac{281}{24} \right) + 7 \frac{1}{40}n \quad \left\{ -\frac{267250385}{31142116} \right\} k + 17 \frac{5}{21} \left(\frac{25}{26}k + 7 \frac{7}{30} \right) = 21 \left(k + 16 \frac{5}{6} \right) \quad \left\{ 13 \frac{926939}{1081905} \right\}$$

$$671) -\frac{29}{8} \left(a + 8 \frac{5}{31} \right) = \frac{419}{32} \left(\frac{12}{35}a + 14 \frac{2}{11} \right) \quad \left\{ -26 \frac{205589}{387376} \right\} 14 \frac{14}{27} \left(2 \frac{23}{35}x + \frac{22}{27} \right) = -\frac{17}{23} \left(199 \frac{1}{21}x + \frac{733}{35} \right) \quad \left\{ -\frac{16026389}{26749521} \right\}$$

$$673) 7 \frac{2}{5}p + \frac{23}{13}p = -7 \left(-\frac{29}{37}p + \frac{17}{20} \right) + \frac{2}{11} \left(p + \frac{97}{13} \right) \quad \left\{ -1 \frac{115601}{370468} \right\}$$

$$674) \frac{3}{2} \left(\frac{8}{11}n + 1 \frac{9}{13} \right) - \frac{17}{25} \left(\frac{8}{9}n + 7 \frac{3}{8} \right) = n + \frac{2}{5} - \frac{23}{26} \quad \left\{ -3 \frac{116169}{132184} \right\}$$

$$675) \frac{5}{2} + 8 \frac{13}{22} \left(1 \frac{3}{10}m + \frac{443}{31} \right) = 14 \frac{1}{6} + 18 \frac{1}{16} \left(1 \frac{10}{33}m + 1 \frac{12}{23} \right) \quad \left\{ 6 \frac{17706917}{23280163} \right\}$$

$$676) 16 \frac{3}{10} \left(-\frac{13}{16}r + 1 \frac{1}{9} \right) = 23 \left(\frac{10}{21}r - \frac{43}{11} \right) \quad \left\{ 4 \frac{1245812}{2682867} \right\}$$

$$677) \frac{1}{2} + 39 \frac{19}{21} \left(20 \frac{8}{35}x - \frac{10}{7} \right) = 20 \frac{23}{24} \left(4 \frac{27}{31}x - 27 \frac{6}{23} \right) \quad \left\{ -1 \frac{13996378}{23486955} \right\}$$

$$678) -\frac{17}{9}b - \frac{34}{21} \left(b + 2 \frac{1}{2} \right) = 6 \frac{13}{20} \left(11 \frac{21}{38}b + 1 \frac{7}{39} \right) \quad \left\{ -\frac{389556}{2631707} \right\}$$

$$679) -\frac{29}{20} \left(3 \frac{13}{20}n + \frac{49}{6} \right) = 7 \frac{7}{32} - 2 \frac{10}{13} \left(15 \frac{13}{37}n - \frac{43}{16} \right) \quad \left\{ \frac{30594745}{42965538} \right\}$$

$$680) 7 \frac{3}{37} \left(-16v + 6 \frac{25}{26} \right) = -25 \left(\frac{33}{20}v - \frac{19}{20} \right) - \frac{13}{16}v \quad \left\{ \frac{65532}{182741} \right\}$$

$$681) 5\frac{5}{6}\left(x - 1\frac{3}{11}\right) - \frac{5}{3}\left(20\frac{16}{39}x + \frac{7}{11}\right) = -1\frac{17}{32}x + 11\frac{1}{19}x \quad \left\{-\frac{6639360}{29504123}\right\}$$

$$682) 26\left(a + \frac{115}{16}\right) = \frac{16}{17}\left(\frac{14}{3}a - 1\frac{3}{5}\right) \quad \left\{-8\frac{31657}{44080}\right\} \quad 683) 3\frac{23}{36}\left(n + 16\frac{1}{2}\right) = 5\frac{19}{33} - 3\frac{1}{6}\left(\frac{2}{3}n + \frac{241}{18}\right) \quad \left\{-16\frac{11557}{13662}\right\}$$

$$684) \frac{197}{10}v + 13\frac{1}{2}\left(28\frac{2}{23}v + \frac{7}{30}\right) = \frac{56}{3}v - \frac{1}{3}\left(\frac{11}{23}v + 1\frac{26}{37}\right) \quad \left\{-\frac{8253}{844414}\right\}$$

$$685) \frac{375}{38}\left(\frac{37}{8}x + 1\right) = \frac{43}{5} + 37\left(9\frac{35}{38}x + 15\frac{5}{23}\right) \quad \left\{-1\frac{8402201}{11237455}\right\} \quad 686) \frac{32}{39}\left(k + 18\frac{6}{13}\right) = \frac{1}{4}\left(\frac{543}{31}k + \frac{4}{13}\right) \quad \left\{-24\frac{397428}{845039}\right\}$$

$$687) \frac{35}{33}\left(n - 1\frac{11}{12}\right) = -\frac{7}{4}\left(1\frac{26}{33}n + \frac{14}{23}\right) \quad \left\{\frac{1259}{5451}\right\} \quad 688) \frac{24}{37}\left(17\frac{17}{28}x + 1\right) = -34\left(x + \frac{4}{5}\right) - \frac{35}{19}x \quad \left\{-\frac{685216}{1162905}\right\}$$

$$689) -\frac{19}{12}\left(m + 9\frac{22}{31}\right) = -\frac{7}{11}\left(\frac{2}{3}m + \frac{27}{32}\right) \quad \left\{-12\frac{30367}{37944}\right\} \quad 690) 18\frac{1}{30}x + \frac{26}{5}\left(x + \frac{17}{9}\right) = \frac{1}{28}\left(\frac{4}{7}x + 1\right) \quad \left\{-\frac{86317}{204738}\right\}$$

$$691) -1\frac{9}{17}p + 9\frac{1}{6}p = 3\frac{3}{10}\left(\frac{75}{19}p + 12\frac{3}{8}\right) - 29\frac{11}{28}\left(11\frac{3}{7}p + \frac{5}{21}\right) \quad \left\{\frac{128537527}{1255508960}\right\}$$

$$692) \frac{527}{32}\left(\frac{340}{37}n + 1\right) = -1\frac{3}{11}n + 7\frac{2}{17}\left(\frac{8}{23}n - \frac{68}{37}\right) \quad \left\{-\frac{150479087}{764527164}\right\}$$

$$693) -\frac{24}{11}r + 1\frac{21}{31}\left(11\frac{1}{35}r + 1\right) = 13\frac{12}{25}\left(29r - 1\frac{20}{27}\right) \quad \left\{\frac{40510393}{603568557}\right\}$$

$$694) \frac{649}{32}x - \frac{5}{23}x = -\frac{16}{29}\left(-\frac{16}{9}x + 1\right) - \frac{2}{3}\left(x + \frac{257}{18}\right) \quad \left\{-\frac{1160672}{2276301}\right\}$$

$$695) 1\frac{12}{13}\left(\frac{275}{39}x - 1\frac{11}{31}\right) = \frac{95}{6}\left(x + 17\frac{13}{15}\right) \quad \left\{-125\frac{127063}{214365}\right\} \quad 696) -1\frac{16}{27}\left(n + 7\frac{1}{2}\right) = 1\frac{1}{9} - 3\frac{1}{13}\left(-\frac{19}{26}n + 7\frac{13}{16}\right) \quad \left\{2\frac{15061}{17527}\right\}$$

$$697) 2\frac{6}{17}\left(b - \frac{11}{7}\right) - 28\left(-\frac{1}{3}b - \frac{1}{13}\right) = -\frac{5}{12}b - 1\frac{5}{36}b \quad \left\{\frac{10746}{92183}\right\}$$

$$698) \frac{1}{18}\left(18\frac{7}{23}v + 1\frac{5}{7}\right) + \frac{14}{23}v = \frac{10}{33}\left(6\frac{5}{12}v + \frac{112}{9}\right) \quad \left\{-11\frac{4030}{7623}\right\}$$

$$699) -1\frac{4}{7}\left(x + 13\frac{11}{30}\right) = -39x - \frac{1}{2}\left(7\frac{21}{40}x + 1\right) \quad \left\{\frac{34448}{69201}\right\}$$

$$700) -\frac{3}{8} - \frac{8}{29}\left(-\frac{31}{18}a - \frac{1}{2}\right) = -\frac{22}{39}\left(1\frac{8}{9}a + 17\frac{8}{27}\right) - \frac{27}{31} \quad \left\{-6\frac{8686787}{11667408}\right\}$$