

## Systems of equations - Elimination - advanced

**Solve by using elimination method**

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

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

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

$$-y - 4x = 7$$

$$\begin{aligned} 3) \quad & -3y + 3 = -3x \\ & 12x + 9y = 30 \end{aligned}$$

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

$$\begin{aligned} 5) \quad & -y = 8 + 3x \\ & 0 = 5 + 2x + y \end{aligned}$$

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

$$\begin{aligned} 7) \quad & 4 - 2y = -2x \\ & y - 3 = 2x \end{aligned}$$

$$\begin{aligned} 8) \quad & -6x - 6y + 12 = 0 \\ & 2 + \frac{4}{3}x = y \end{aligned}$$

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

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

$$\begin{aligned} 11) \quad & -x = -y - 3 \\ & -6y - 3x = -9 \end{aligned}$$

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

$$\begin{aligned} 13) \quad & 0 = x + 2y \\ & 1 + x = -y \end{aligned}$$

$$\begin{aligned} 14) \quad & 5 - 2y + x = 0 \\ & 6y = 12 + 3x \end{aligned}$$

$$\begin{aligned} 15) \quad & 1 = -x + y \\ & -2y + 2 = -2x \end{aligned}$$

$$\begin{aligned} 16) \quad & 3y = -24 + 6x \\ & 2x = y + 8 \end{aligned}$$

$$\begin{aligned} 17) \quad & 4x + 4y = 8 \\ & 4y - 4 + 4x = 0 \end{aligned}$$

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

$$\begin{aligned} 19) \quad & -2x = -4 + 2y \\ & -4y - x + 5 = 0 \end{aligned}$$

$$\begin{aligned} 20) \quad & 6 + 2x - y = 0 \\ & 0 = y + 2x + 10 \end{aligned}$$

$$\begin{aligned} 21) \quad & -y - 2x = -4 \\ & 0 = -6x + 12 - 2y \end{aligned}$$

$$\begin{aligned} 22) \quad & 12 + 2x + 2y = 0 \\ & 0 = 4y - 4x \end{aligned}$$

$$\begin{aligned} 23) \quad x &= 7 - 4y \\ 2y + x &= 3 \end{aligned}$$

$$\begin{aligned} 24) \quad 2x &= y + 6 \\ -4x &= -y - 8 \end{aligned}$$

$$\begin{aligned} 25) \quad y &= -2x - 4 \\ -y &= -8 - 2x \end{aligned}$$

$$\begin{aligned} 26) \quad -1 &= 3x - y \\ 0 &= -5 - y - 3x \end{aligned}$$

$$\begin{aligned} 27) \quad & 12y = -6x \\ & -4y + 4x = -12 \end{aligned}$$

$$\begin{aligned} 28) \quad & -\frac{1}{10}y = 1 + \frac{2}{5}x \\ & -8x = 24 + 4y \end{aligned}$$

$$\begin{aligned} 29) \quad & 8 - 4y = -4x \\ & 7 - 2y = x \end{aligned}$$

$$\begin{aligned} 30) \quad & -x = -4y + 5 \\ & -\frac{4}{3}y - \frac{1}{3}x = -1 \end{aligned}$$



$$31) \begin{aligned} x &= y \\ -y &= -3x - 6 \end{aligned}$$

$$32) \begin{aligned} 0 &= -22 - 2y + 6x \\ -4y &= -1 + 3x \end{aligned}$$

$$33) \begin{aligned} -3x &= 4y \\ 0 &= -2y + 3x \end{aligned}$$

$$34) \begin{aligned} 3x &= 6 + 4y \\ 0 &= 2y + 18 + 6x \end{aligned}$$

$$\begin{aligned} 35) \quad & -5 - y = -x \\ & x + y = -3 \end{aligned}$$

$$\begin{aligned} 36) \quad & -4x = -2 + 3y \\ & 6y = 12x + 24 \end{aligned}$$

$$\begin{aligned} 37) \quad & -2x = -4 + 2y \\ & -x - \frac{1}{2}y = -2 \end{aligned}$$

$$\begin{aligned} 38) \quad & 15 + 6y = 3x \\ & 3x - 2y = -1 \end{aligned}$$

$$\begin{aligned} 39) \quad & -2y - x = 1 \\ & 3x - 9 = 6y \end{aligned}$$

$$\begin{aligned} 40) \quad & 2x + 6 = 2y \\ & y + \frac{2}{3}x = -2 \end{aligned}$$

$$\begin{aligned} 41) \quad & x + 4y = -3 \\ & 0 = 9 + 4y + 3x \end{aligned}$$

$$\begin{aligned} 42) \quad & 2x = -2 - 4y \\ & -2x - y = -4 \end{aligned}$$

$$\begin{aligned} 43) \quad & -8 = 6x + 4y \\ & -6x - 18 = -6y \end{aligned}$$

$$\begin{aligned} 44) \quad & 2x + 10 = -4y \\ & -12 = 2x + 4y \end{aligned}$$

$$\begin{aligned} 45) \quad & 3y + 2x = 3 \\ & -\frac{1}{2}x = -1 + y \end{aligned}$$

$$\begin{aligned} 46) \quad & -y = -3x + 7 \\ & y - 3x = -5 \end{aligned}$$

$$47) \begin{aligned} 0 &= -y + 2 + 3x \\ -4 + y &= 3x \end{aligned}$$

$$48) \begin{aligned} 2x - 4y &= -2 \\ 3x - 3 - 3y &= 0 \end{aligned}$$

$$49) \begin{aligned} -4y + 24 - 6x &= 0 \\ -2y + 3x &= 12 \end{aligned}$$

$$50) \begin{aligned} 3y &= 9 - 3x \\ -\frac{1}{3}y &= -1 + \frac{1}{3}x \end{aligned}$$

$$51) \begin{aligned} 4 &= -2y - 3x \\ -4x - 2y - 4 &= 0 \end{aligned}$$

$$52) \begin{aligned} x + 4 &= 4y \\ 12 - 4y - x &= 0 \end{aligned}$$

$$53) \begin{aligned} y &= 1 - x \\ y + 3 - 3x &= 0 \end{aligned}$$

$$54) \begin{aligned} -x + 1 &= -2y \\ -3y &= x + 4 \end{aligned}$$

$$55) \begin{aligned} 0 &= 11 - 4x + 3y \\ 3y + 3x - 3 &= 0 \end{aligned}$$

$$56) \begin{aligned} -1 + \frac{1}{2}x &= -y \\ -7 + y &= -2x \end{aligned}$$

$$57) \begin{aligned} 1 + \frac{3}{11}y &= \frac{2}{11}x \\ -3y &= -3x + 15 \end{aligned}$$

$$58) \begin{aligned} 0 &= 4y + 4x \\ -\frac{3}{4} + \frac{1}{4}x &= -y \end{aligned}$$

$$59) \begin{aligned} -\frac{1}{3}y &= -1 - \frac{1}{3}x \\ -2x &= 3y + 6 \end{aligned}$$

$$60) \begin{aligned} -3x &= -8 + y \\ 2x - 12 &= y \end{aligned}$$

$$61) \begin{aligned} -4x - 12 &= 4y \\ 0 &= 3 + y - \frac{3}{4}x \end{aligned}$$

$$62) \begin{aligned} -2x &= 4y - 10 \\ 2x &= 4y + 2 \end{aligned}$$



$$\begin{aligned} 63) \quad & -4y + 4 + 4x = 0 \\ & -4x + 2y - 10 = 0 \end{aligned}$$

$$\begin{aligned} 64) \quad & -6x = 6y \\ & -3y = 2x - 1 \end{aligned}$$

$$\begin{aligned} 65) \quad & 3 = -y + x \\ & -3 = x + y \end{aligned}$$

$$\begin{aligned} 66) \quad & -3 = -3x + 3y \\ & -1 + x - 3y = 0 \end{aligned}$$

$$67) \begin{aligned} -1 + y - x &= 0 \\ -x &= -3y + 9 \end{aligned}$$

$$68) \begin{aligned} 2y + 3x &= -4 \\ 0 &= x + 4 - 2y \end{aligned}$$

$$69) \begin{aligned} 0 &= x + \frac{4}{3}y + \frac{7}{3} \\ 0 &= 3x + 4 + y \end{aligned}$$

$$70) \begin{aligned} 3 - 3y + 3x &= 0 \\ y &= \frac{7}{3} + \frac{1}{3}x \end{aligned}$$

$$\begin{aligned} 71) \quad & 16 + 8x = 4y \\ & -24 - 6y = 12x \end{aligned}$$

$$\begin{aligned} 72) \quad & 8y = 8x - 24 \\ & 0 = 12 - y - 4x \end{aligned}$$

$$\begin{aligned} 73) \quad & 0 = 4x - 8 + 2y \\ & 0 = 2y - 8 - 4x \end{aligned}$$

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

$$\begin{aligned} 75) \quad & 8 = 2y + x \\ & -7 + x = -2y \end{aligned}$$

$$\begin{aligned} 76) \quad & 12 + x = -4y \\ & -4y = 12 + x \end{aligned}$$

$$\begin{aligned} 77) \quad & 2x - 8 = -y \\ & -2x + 6 = y \end{aligned}$$

$$\begin{aligned} 78) \quad & 0 = 3x - 3y \\ & -3x - 1 = -4y \end{aligned}$$

$$\begin{aligned} 79) \quad & -1 + 3x + y = 0 \\ & y + 2 + 3x = 0 \end{aligned}$$

$$\begin{aligned} 80) \quad & 0 = -8 - y - 2x \\ & \frac{1}{2}y = -4 - x \end{aligned}$$

$$\begin{aligned} 81) \quad & y = 12 + 3x \\ & 3 = -3x - 2y \end{aligned}$$

$$\begin{aligned} 82) \quad & 2x - 6 + 4y = 0 \\ & -4y + 9 = 3x \end{aligned}$$

$$\begin{aligned} 83) \quad 0 &= x - 11 + 4y \\ -3y &= -x - 3 \end{aligned}$$

$$\begin{aligned} 84) \quad 0 &= 5 - 4y - 3x \\ 3y &= 15 + 9x \end{aligned}$$

$$\begin{aligned} 85) \quad 7 &= -x - 4y \\ -3x &= 9 + 6y \end{aligned}$$

$$\begin{aligned} 86) \quad 0 &= -3x - 6 + 2y \\ -y + 3x &= -3 \end{aligned}$$

$$87) \begin{aligned} -y &= x \\ -y &= 4x - 6 \end{aligned}$$

$$88) \begin{aligned} 4 + 4y &= -6x \\ 8 - 2y &= -2x \end{aligned}$$

$$89) \begin{aligned} -2y + 3x &= 5 \\ 0 &= x - 7 + 2y \end{aligned}$$

$$90) \begin{aligned} -y + x - 2 &= 0 \\ 3x + 2 + y &= 0 \end{aligned}$$

$$\begin{aligned} 91) \quad & -y + x = 0 \\ & -9 = 2y + x \end{aligned}$$

$$\begin{aligned} 92) \quad & -3y = x + 2 \\ & 0 = 2 + 2y + x \end{aligned}$$

$$\begin{aligned} 93) \quad & -x + 11 = 2y \\ & 0 = -x + y - 1 \end{aligned}$$

$$\begin{aligned} 94) \quad & y - 2 = 2x \\ & y = 2 - 4x \end{aligned}$$



$$\begin{aligned} 95) \quad & 4y - 2x - 8 = 0 \\ & -x = -4y + 10 \end{aligned}$$

$$\begin{aligned} 96) \quad & -2y + 4x = 0 \\ & -5 + 2y + x = 0 \end{aligned}$$

$$\begin{aligned} 97) \quad & 3y - 15 - 3x = 0 \\ & -x + 1 = 2y \end{aligned}$$

$$\begin{aligned} 98) \quad & 0 = -x + y \\ & 2x = -2y + 12 \end{aligned}$$

$$\begin{aligned} 99) \quad & 2 = 2x - 4y \\ & -4y - x = -1 \end{aligned}$$

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

$$\begin{aligned} 101) \quad & -3y = -4x \\ & -3y = -6 - 2x \end{aligned}$$

$$\begin{aligned} 102) \quad & -x + 2y = -6 \\ & 0 = 3x - 3y \end{aligned}$$

$$103) \begin{aligned} -6y &= -x + 4 \\ x + 7 + 5y &= 0 \end{aligned}$$

$$104) \begin{aligned} 6 + x - 3y &= 0 \\ 5y &= -x + 2 \end{aligned}$$

$$105) \begin{aligned} 0 &= y + \frac{2}{3}x + \frac{2}{3} \\ 1 &= -x - \frac{1}{4}y \end{aligned}$$

$$106) \begin{aligned} 0 &= 24 + 12x + 15y \\ 10y &= -34 - 8x \end{aligned}$$

$$107) \begin{aligned} -5y &= -10 + 6x \\ 0 &= -6x + 10 - 5y \end{aligned}$$

$$108) \begin{aligned} -6x &= 4y \\ 0 &= -4y - 6x - 10 \end{aligned}$$

$$109) \begin{aligned} -8y - 8 &= -4x \\ 12 + 12y &= 6x \end{aligned}$$

$$110) \begin{aligned} 4y &= 4x + 12 \\ 0 &= 30 + 18x - 12y \end{aligned}$$

$$\begin{aligned} 111) \quad & -5 = y + 5x \\ & 1 = -y - x \end{aligned}$$

$$\begin{aligned} 112) \quad & -y = 3x - 5 \\ & \frac{1}{2} = y + \frac{3}{4}x \end{aligned}$$

$$\begin{aligned} 113) \quad & 0 = 12y + 27 + 9x \\ & -1 + 5x = -4y \end{aligned}$$

$$\begin{aligned} 114) \quad & 4x + 2y = 14 \\ & -4y = 10x - 34 \end{aligned}$$

$$115) 0 = -y + 3x + 13$$

$$y - \frac{3}{2}x = \frac{17}{2}$$

$$116) 0 = -12 - 2x - 2y$$

$$-10y + 4x = 32$$

$$117) 2x - 6y - 18 = 0$$

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

$$118) 10x = -12y - 8$$

$$3y = -7 - 5x$$

$$119) \begin{aligned} 0 &= 2x - y + 6 \\ -2x + 10 - 3y &= 0 \end{aligned}$$

$$120) \begin{aligned} -3 &= -y - \frac{3}{4}x \\ 16 &= 4x + 4y \end{aligned}$$

$$121) \begin{aligned} 0 &= 4 - y - 2x \\ -6y + 2x + 10 &= 0 \end{aligned}$$

$$122) \begin{aligned} 3 &= 5y - 2x \\ 1 - 3y + 2x &= 0 \end{aligned}$$

$$\begin{aligned} 123) \quad x &= 12 - 3y \\ 0 &= -3y + 12 + 5x \end{aligned}$$

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

$$\begin{aligned} 125) \quad -36 &= 12x - 18y \\ 8 &= 4y - 4x \end{aligned}$$

$$\begin{aligned} 126) \quad -x &= 4y \\ 4y + 12 - 2x &= 0 \end{aligned}$$



$$\begin{aligned} 127) \quad & -2 - 2y = 3x \\ & 0 = -2x - 2y \end{aligned}$$

$$\begin{aligned} 128) \quad & 0 = 18 - 3y + 4x \\ & -3y = 18 + 2x \end{aligned}$$

$$\begin{aligned} 129) \quad & 1 - \frac{1}{2}y = \frac{1}{3}x \\ & -3x - 6y = -12 \end{aligned}$$

$$\begin{aligned} 130) \quad & 6y = x \\ & 2x = -6y + 18 \end{aligned}$$

$$\begin{aligned} 131) \quad & 17 = -3y + 2x \\ & 0 = 6x - 6y - 36 \end{aligned}$$

$$\begin{aligned} 132) \quad & -2y = 2x \\ & 16 = 2x + 6y \end{aligned}$$

$$\begin{aligned} 133) \quad & 18 - 6x = y \\ & 3 = x - \frac{1}{3}y \end{aligned}$$

$$\begin{aligned} 134) \quad & 3x + 9y - 3 = 0 \\ & 3y + 4x - 13 = 0 \end{aligned}$$

$$135) \begin{aligned} -4x - 2y &= -8 \\ -4x &= -4 + y \end{aligned}$$

$$136) \begin{aligned} 8x &= 8 - 12y \\ -5y + 4 &= 4x \end{aligned}$$

$$137) \begin{aligned} -1 &= 5y + x \\ -1 &= 5y + x \end{aligned}$$

$$138) \begin{aligned} 2 - 2y &= 4x \\ 2y - 2 + 4x &= 0 \end{aligned}$$

$$139) \begin{aligned} -10y + 8x + 14 &= 0 \\ -5y &= -7 - 4x \end{aligned}$$

$$140) \begin{aligned} -8x &= -8y + 8 \\ -14 &= 2x - 4y \end{aligned}$$

$$141) \begin{aligned} \frac{3}{10}y - \frac{1}{10}x &= -1 \\ 2x &= 6y + 20 \end{aligned}$$

$$142) \begin{aligned} -16 - 5x &= -4y \\ 2x &= -4 + 4y \end{aligned}$$

$$\begin{aligned} 143) \quad & 3x = 18 - 9y \\ & -7 = -4y - x \end{aligned}$$

$$\begin{aligned} 144) \quad & -3x + 3y = 9 \\ & 4y - 2 = -6x \end{aligned}$$

$$\begin{aligned} 145) \quad & -16 + 6x = 2y \\ & 4 = 2x - 2y \end{aligned}$$

$$\begin{aligned} 146) \quad & -y = x - 2 \\ & -6 + 2x + y = 0 \end{aligned}$$

$$147) \begin{aligned} 5 &= -3x - 5y \\ -5y &= 6x - 10 \end{aligned}$$

$$148) \begin{aligned} -y &= -x - 9 \\ 3y + 33 &= -12x \end{aligned}$$

$$149) \begin{aligned} -4x - 4y &= 12 \\ 4 + 2y &= -4x \end{aligned}$$

$$150) \begin{aligned} 6x - 4y + 8 &= 0 \\ 3x - 6y &= 12 \end{aligned}$$

$$151) \begin{aligned} -24 - 6y - 2x &= 0 \\ 6y - 3x &= -9 \end{aligned}$$

$$152) \begin{aligned} -4 - 4x &= -4y \\ 4y &= 4 - 5x \end{aligned}$$

$$153) \begin{aligned} 2y - 6 - 4x &= 0 \\ 5y - 9 &= 4x \end{aligned}$$

$$154) \begin{aligned} 0 &= 4x - 5y - 14 \\ 3x - 13 &= 5y \end{aligned}$$

$$155) \begin{aligned} -24 - 4y &= -10x \\ 5x - 6y &= -4 \end{aligned}$$

$$156) \begin{aligned} 6y + 16 + x &= 0 \\ -2 - 3y &= -x \end{aligned}$$

$$157) \begin{aligned} 4x + 16 - 5y &= 0 \\ 16 &= 3y - 4x \end{aligned}$$

$$158) \begin{aligned} 0 &= -1 + \frac{1}{6}x - \frac{1}{3}y \\ -3y &= 3x \end{aligned}$$



$$\begin{aligned} 159) \quad & -4y + 1 + 3x = 0 \\ & 0 = -15y + 9x + 15 \end{aligned}$$

$$\begin{aligned} 160) \quad & -3y = x - 4 \\ & -4y - 2x = -8 \end{aligned}$$

$$\begin{aligned} 161) \quad & 13 - 3y = -x \\ & 2x - \frac{3}{2}y = 1 \end{aligned}$$

$$\begin{aligned} 162) \quad & y + 2x - 10 = 0 \\ & -2x = -10 + 5y \end{aligned}$$

$$163) \quad 28 = 4x + 6y$$
$$1 - \frac{3}{8}y = -\frac{1}{2}x$$

$$164) \quad 0 = -4x + 10y + 12$$
$$y - \frac{1}{2}x + \frac{3}{2} = 0$$

$$165) \quad 0 = -6y - 3x - 6$$
$$-6y = 2x$$

$$166) \quad -4y + 3x = -16$$
$$-4y = -15 - 3x$$

$$167) \begin{aligned} 10 &= x + 4y \\ 4y &= 9 - x \end{aligned}$$

$$168) \begin{aligned} 6x &= -4y - 2 \\ -2 &= 6x + 4y \end{aligned}$$

$$169) \begin{aligned} -\frac{2}{7}x &= -1 - \frac{3}{14}y \\ -1 - \frac{3}{4}y &= -\frac{1}{2}x \end{aligned}$$

$$170) \begin{aligned} 11 &= -4y - x \\ -4y &= x + 11 \end{aligned}$$

$$171) \begin{aligned} 0 &= -5y - 3x - 7 \\ 11 + 5y &= x \end{aligned}$$

$$172) \begin{aligned} -1 &= \frac{3}{11}x - \frac{2}{11}y \\ -2y + 12 &= -3x \end{aligned}$$

$$173) \begin{aligned} 2y &= -3 + 5x \\ 6x &= -6y + 54 \end{aligned}$$

$$174) \begin{aligned} 2x + 2y &= 16 \\ 2x - 14 &= -y \end{aligned}$$

$$175) \begin{aligned} 0 &= -12y - 12x + 24 \\ 4x + 5y &= 12 \end{aligned}$$

$$176) \begin{aligned} \frac{3}{10}y &= -3 - \frac{3}{2}x \\ -4x + y &= 8 \end{aligned}$$

$$177) \begin{aligned} 3y - 5x - 8 &= 0 \\ 2y &= -5x - 3 \end{aligned}$$

$$178) \begin{aligned} -2x &= -y - 4 \\ 42 &= -6y + 18x \end{aligned}$$

$$179) \begin{aligned} -x &= -9 - 2y \\ 2y - 3x &= -11 \end{aligned}$$

$$180) \begin{aligned} 8 &= -4y + x \\ 2 - 2y - x &= 0 \end{aligned}$$

$$181) \begin{aligned} 5x + 13 - y &= 0 \\ 0 &= -1 + \frac{1}{11}y - \frac{4}{11}x \end{aligned}$$

$$182) \begin{aligned} 0 &= -10 - 6y + 2x \\ -2x + 10 &= -4y \end{aligned}$$

$$\begin{aligned} 183) \quad & 2y = x + 14 \\ & 3x - 2y + 18 = 0 \end{aligned}$$

$$\begin{aligned} 184) \quad & 3x + 3 + y = 0 \\ & -4y = 3x - 15 \end{aligned}$$

$$\begin{aligned} 185) \quad & 2x = -2y \\ & 5 + 3x = 2y \end{aligned}$$

$$\begin{aligned} 186) \quad & 0 = -12 + 6y - 6x \\ & 14 + 3x + y = 0 \end{aligned}$$

$$187) \begin{aligned} 0 &= 2x + 4 - 3y \\ -6y + 2x &= -16 \end{aligned}$$

$$188) \begin{aligned} -4 &= 4y - 5x \\ -4 - 3x &= 4y \end{aligned}$$

$$189) \begin{aligned} -4x + 10 &= -y \\ 9x &= 3y + 27 \end{aligned}$$

$$190) \begin{aligned} 4x + 12 &= -2y \\ x &= -3 + 2y \end{aligned}$$



$$\begin{aligned} 191) \quad & -6x + y - 13 = 0 \\ & 45 - 9y = -18x \end{aligned}$$

$$\begin{aligned} 192) \quad & 6x + 3y = 18 \\ & -4x - 3y + 16 = 0 \end{aligned}$$

$$\begin{aligned} 193) \quad & 12 = -5x - 3y \\ & -9y - 6x = -18 \end{aligned}$$

$$\begin{aligned} 194) \quad & 1 + \frac{6}{5}y = \frac{1}{5}x \\ & 0 = x + 3y + 4 \end{aligned}$$

$$195) \begin{aligned} 1 + 6x &= -5y \\ 6y - 18x - 24 &= 0 \end{aligned}$$

$$196) \begin{aligned} -6y + x - 18 &= 0 \\ -12y - 36 + 8x &= 0 \end{aligned}$$

$$197) \begin{aligned} -11 + 6x + y &= 0 \\ 6x &= 11 - y \end{aligned}$$

$$198) \begin{aligned} 0 &= 7 + 2x - 3y \\ 3y - 2x - 7 &= 0 \end{aligned}$$

$$199) \begin{aligned} 2y - 4x &= -18 \\ -4x &= -2y - 18 \end{aligned}$$

$$200) \begin{aligned} 6 &= -3y - \frac{12}{5}x \\ 10 &= -2x - 5y \end{aligned}$$

$$201) \begin{aligned} 10x - 42 + 16y &= 0 \\ -15x - 24y &= -24 \end{aligned}$$

$$202) \begin{aligned} -34 + 3x &= -8y \\ 2x - 4 &= -24y \end{aligned}$$

$$\begin{aligned} 203) \quad & -9y = -6x \\ & -9x = 54 - 9y \end{aligned}$$

$$\begin{aligned} 204) \quad & -3y = -12x + 129 \\ & -19y = 2x + 37 \end{aligned}$$

$$\begin{aligned} 205) \quad & -39 = 3x - 12y \\ & 0 = x + \frac{43}{11} - \frac{24}{11}y \end{aligned}$$

$$\begin{aligned} 206) \quad & 14y = -57 - 5x \\ & -12 = 7y - 3x \end{aligned}$$

$$\begin{aligned} 207) \quad & 6 + 18y = 2x \\ & -x + 3y = -3 \end{aligned}$$

$$\begin{aligned} 208) \quad & -10y - 5 = -15x \\ & -20y = 56 + 16x \end{aligned}$$

$$\begin{aligned} 209) \quad & 10x - 10 = -20y \\ & -5x = 16y + 19 \end{aligned}$$

$$\begin{aligned} 210) \quad & 40y + 10 = 5x \\ & -x + 20y = -2 \end{aligned}$$

$$\begin{aligned} 211) \quad 0 &= -2y + 26 - 17x \\ 0 &= -120 - 60y - 60x \end{aligned}$$

$$\begin{aligned} 212) \quad -2 &= 20x - 6y \\ -4y &= -58 - 2x \end{aligned}$$

$$\begin{aligned} 213) \quad 0 &= 1 + x - 9y \\ 6y + x &= 29 \end{aligned}$$

$$\begin{aligned} 214) \quad -y &= -\frac{1}{4} - \frac{5}{4}x \\ 6y - 34 &= 10x \end{aligned}$$

$$\begin{aligned} 215) \quad & 45 - 24y = -5x \\ & 90 - 18x + 36y = 0 \end{aligned}$$

$$\begin{aligned} 216) \quad & 5y = -3x + 21 \\ & 0 = 15x - 10y \end{aligned}$$

$$\begin{aligned} 217) \quad & 0 = 1 - \frac{24}{25}y + \frac{1}{5}x \\ & 6x + 8y + 30 = 0 \end{aligned}$$

$$\begin{aligned} 218) \quad & 86 - 54y - 4x = 0 \\ & 23 + 9y = 4x \end{aligned}$$

$$219) -\frac{24}{5} + \frac{2}{5}x = -y$$
$$-4x - 32 = 2y$$

$$220) 36 = 8x + 18y$$
$$2 - y + 24x = 0$$

$$221) 7x - 9 = -2y$$
$$-\frac{57}{7} = -3x - \frac{9}{14}y$$

$$222) -4x - 44 = -2y$$
$$0 = -x - 7 + \frac{3}{4}y$$



$$\begin{aligned} 223) \quad & 8 - 12x = -16y \\ & 0 = 6x - 11 - y \end{aligned}$$

$$\begin{aligned} 224) \quad & -4x + 8 = -12y \\ & -48y = 4 - 20x \end{aligned}$$

$$\begin{aligned} 225) \quad & y = -\frac{4}{7}x + \frac{5}{7} \\ & 0 = -4x - 3y - 23 \end{aligned}$$

$$\begin{aligned} 226) \quad & -x - \frac{10}{3} = -\frac{16}{3}y \\ & 32y - 14 - 9x = 0 \end{aligned}$$

$$227) -3 + \frac{108}{11}x = \frac{57}{11}y$$
$$23 + 7y - 18x = 0$$

$$228) -3y = 6x$$
$$54 + 36x = -18y$$

$$229) -\frac{8}{9}y = x + \frac{16}{9}$$
$$0 = 16y + 32 + 18x$$

$$230) -y - 11x = -5$$
$$-6y + 30 = 66x$$

$$231) \begin{aligned} -\frac{13}{7} - \frac{1}{7}x &= y \\ -14y - 42 &= 2x \end{aligned}$$

$$232) \begin{aligned} -18x - 15y &= 21 \\ 6x &= -3y - 33 \end{aligned}$$

$$233) \begin{aligned} 46 &= 4y + 2x \\ -4y + 2x &= 30 \end{aligned}$$

$$234) \begin{aligned} y &= \frac{31}{10} - \frac{9}{10}x \\ 0 &= x + \frac{30}{17}y - \frac{3}{17} \end{aligned}$$

$$235) -13 = -x - 16y$$

$$\frac{3}{4}x + \frac{5}{4} = -y$$

$$236) -5y = 7x$$

$$42 = 14x + 16y$$

$$237) -9x - 18 = -2y$$

$$-36 - 18x + 13y = 0$$

$$238) 2y - 58 = 24x$$

$$0 = 24x + 108 - 12y$$

$$239) 0 = -x - 9 + \frac{1}{2}y$$
$$-6y - x = 9$$

$$240) 0 = -4y + 3x - 16$$
$$14y - 9x = -56$$

$$241) -4 - 8x + 18y = 0$$
$$-12x + 30 = -9y$$

$$242) -10x + 18y = 66$$
$$-39 = -18y + x$$

$$\begin{aligned} 243) \quad & -90 = 30y - 15x \\ & -60x - 180 = 60y \end{aligned}$$

$$\begin{aligned} 244) \quad & 4x = -17y - 28 \\ & -2x = 20y + 60 \end{aligned}$$

$$\begin{aligned} 245) \quad & 0 = -54 - 12y + 19x \\ & -20 = -2x - \frac{8}{5}y \end{aligned}$$

$$\begin{aligned} 246) \quad & 26x = 120 + 68y \\ & -33 = -8x + 17y \end{aligned}$$

$$247) \quad 3x - \frac{138}{17} = -\frac{42}{17}y$$
$$58 + 7y = 5x$$

$$248) \quad -28 - 6y - 14x = 0$$
$$-\frac{1}{2}x = 1 - \frac{1}{2}y$$

$$249) \quad 12x - 40 = -16y$$
$$-\frac{1}{8} = -2y - \frac{11}{16}x$$

$$250) \quad 0 = 1 - \frac{1}{8}x - \frac{1}{4}y$$
$$-54 + 3y = -12x$$

$$\begin{aligned} 251) \quad 3 &= -3y - 34x \\ 0 &= -18 - 18y + 17x \end{aligned}$$

$$\begin{aligned} 252) \quad -2x &= -54 - 8y \\ 28 &= -44x + 24y \end{aligned}$$

$$\begin{aligned} 253) \quad 14 - \frac{3}{2}x &= -y \\ -3y &= -9x + 51 \end{aligned}$$

$$\begin{aligned} 254) \quad -6y + 9 + 33x &= 0 \\ 7y &= -50 - 22x \end{aligned}$$



$$\begin{aligned} 255) \quad & 22 - 2y = -13x \\ & -26x = -17y + 18 \end{aligned}$$

$$\begin{aligned} 256) \quad & 0 = -5x + 8y - 25 \\ & -36x + 72y = 180 \end{aligned}$$

$$\begin{aligned} 257) \quad & -40 + 12x = -8y \\ & 12y = 48 - 12x \end{aligned}$$

$$\begin{aligned} 258) \quad & -3y = -2x + 46 \\ & -12 - 12x = 6y \end{aligned}$$

$$\begin{aligned} 259) \quad & -6x - 13y + 27 = 0 \\ & 12x = -26y + 54 \end{aligned}$$

$$\begin{aligned} 260) \quad & 12y - 4 = -4x \\ & 24y = -8x + 8 \end{aligned}$$

$$\begin{aligned} 261) \quad & 39y = 21x + 39 \\ & -21x + 39y = 60 \end{aligned}$$

$$\begin{aligned} 262) \quad & -24y - 44x + 116 = 0 \\ & 0 = 11x - 14y + 31 \end{aligned}$$

$$\begin{aligned} 263) \quad & -3 - y = -4x \\ & -y + 1 = -4x \end{aligned}$$

$$\begin{aligned} 264) \quad & 8y = 8 - 24x \\ & 0 = 13y - 46 + 6x \end{aligned}$$

$$\begin{aligned} 265) \quad & 0 = 20y - 20x \\ & -64 + 4x - 20y = 0 \end{aligned}$$

$$\begin{aligned} 266) \quad & 66 - 22y = -44x \\ & 13y = 39 - 11x \end{aligned}$$

$$\begin{aligned} 267) \quad & 20 = 6y + 4x \\ & 10x + 24y = -4 \end{aligned}$$

$$\begin{aligned} 268) \quad & 8x = 38 - 5y \\ & 16x = 6 - 17y \end{aligned}$$

$$\begin{aligned} 269) \quad & -3x - 44 = -10y \\ & y - \frac{2}{15} = -\frac{7}{30}x \end{aligned}$$

$$\begin{aligned} 270) \quad & -\frac{16}{9} = -2x - \frac{2}{9}y \\ & -8y = 25 - 17x \end{aligned}$$

$$271) -x - \frac{7}{3} = \frac{1}{3}y$$
$$-8x = 5 - 11y$$

$$272) 0 = -30y + 14x - 6$$
$$-50 + 14x - 19y = 0$$

$$273) 0 = 4x + y - 12$$
$$-24y = 120 - 6x$$

$$274) 54x = 54 - 48y$$
$$-4y = 4x - 4$$

$$\begin{aligned} 275) \quad 0 &= 57y - 63x - 81 \\ 12y - 7x + 8 &= 0 \end{aligned}$$

$$\begin{aligned} 276) \quad 10y - 18x &= -54 \\ -20 &= 20x - 20y \end{aligned}$$

$$\begin{aligned} 277) \quad 0 &= 1 - x - 34y \\ -10 &= -10x - 17y \end{aligned}$$

$$\begin{aligned} 278) \quad -4x + 37 + y &= 0 \\ 59 + 7x &= 10y \end{aligned}$$

$$279) -2 + \frac{26}{19}y = \frac{2}{19}x$$
$$-4 - 26y = 5x$$

$$280) 9x = 12y - 120$$
$$13x + 2y = 20$$

$$281) -x + \frac{4}{3}y = \frac{16}{3}$$
$$-1 + \frac{4}{7}y = \frac{15}{28}x$$

$$282) 20x + 11y = -20$$
$$30y - 10 = 10x$$

$$\begin{aligned} 283) \quad & -19x = 44 + 22y \\ & 11y = -22 + 4x \end{aligned}$$

$$\begin{aligned} 284) \quad & -112 + 4y = -24x \\ & x + 7 + 6y = 0 \end{aligned}$$

$$\begin{aligned} 285) \quad & 32 = -4y + 27x \\ & 16 + 2y + 3x = 0 \end{aligned}$$

$$\begin{aligned} 286) \quad & -54 + 28x - y = 0 \\ & 0 = 120 - 32y - 28x \end{aligned}$$



$$287) -\frac{1}{3}x = -y - 5$$
$$0 = 34x - 36y + 84$$

$$288) -12y + 10x = 32$$
$$36y + 96 - 30x = 0$$

$$289) 19x - 8y = 8$$
$$1 = -y + \frac{19}{8}x$$

$$290) 2x + \frac{10}{3}y = 10$$
$$33x - 165 = -90y$$

$$291) \begin{aligned} 36x - 90 &= -54y \\ -36y &= 24x \end{aligned}$$

$$292) \begin{aligned} -3 &= -\frac{9}{10}y - \frac{6}{5}x \\ -\frac{10}{7}x &= y - \frac{22}{7} \end{aligned}$$

$$293) \begin{aligned} 0 &= -x - 17y - 47 \\ 36 &= 34y - 8x \end{aligned}$$

$$294) \begin{aligned} 15 &= -3x - 4y \\ -30x - 24y - 102 &= 0 \end{aligned}$$

$$\begin{aligned} 295) \quad 0 &= 18x - 10y - 16 \\ 0 &= 17y - 6x - 22 \end{aligned}$$

$$\begin{aligned} 296) \quad -36y - 12 - 24x &= 0 \\ -\frac{2}{3}x - \frac{1}{3} &= y \end{aligned}$$

$$\begin{aligned} 297) \quad x + \frac{11}{9}y &= -\frac{13}{3} \\ 150 &= 66y + 6x \end{aligned}$$

$$\begin{aligned} 298) \quad 32 &= -15x + 14y \\ -7x &= -28y - 28 \end{aligned}$$

$$\begin{aligned} 299) \quad & -14x + 47 = 3y \\ & 0 = -18x - 24y \end{aligned}$$

$$\begin{aligned} 300) \quad & -42x = -120 - 9y \\ & -16 = -28x - 10y \end{aligned}$$

$$\begin{aligned} 301) \quad & -\frac{5}{4}y = -x + \frac{21}{4} \\ & -387 = -57y - 24x \end{aligned}$$

$$\begin{aligned} 302) \quad & 0 = 3 - \frac{13}{8}y - \frac{7}{2}x \\ & -146 - 42x = -26y \end{aligned}$$

$$\begin{aligned} 303) \quad & 26x - 24 = 43y \\ & 13x - 39 = 26y \end{aligned}$$

$$\begin{aligned} 304) \quad & -88y - 184x = -160 \\ & -1 + \frac{1}{29}y = \frac{23}{58}x \end{aligned}$$

$$\begin{aligned} 305) \quad & 96y - 40x + 24 = 0 \\ & -90 = 2x - 96y \end{aligned}$$

$$\begin{aligned} 306) \quad & x - \frac{32}{7}y - \frac{150}{7} = 0 \\ & 0 = 24y + 18x + 252 \end{aligned}$$

$$307) \begin{aligned} 0 &= -52 + 34x + 8y \\ -27x &= -6 + 4y \end{aligned}$$

$$308) \begin{aligned} 9x - 1 &= \frac{44}{3}y \\ -9x &= -111 + 22y \end{aligned}$$

$$309) \begin{aligned} -12x + 150y &= -138 \\ 6x - 10y &= 264 \end{aligned}$$

$$310) \begin{aligned} -66y + 25x &= -29 \\ 33y &= 7x - 79 \end{aligned}$$

$$311) \quad -\frac{14}{13}x = -y + \frac{127}{13}$$
$$7x + 94 + 24y = 0$$

$$312) \quad 0 = 19y - 18x + 122$$
$$-68 + 26y = 54x$$

$$313) \quad -74 = 13x + 42y$$
$$19y + 39x = 99$$

$$314) \quad \frac{5}{6}y = -1 - \frac{1}{3}x$$
$$x + \frac{20}{9}y = -\frac{17}{9}$$

$$315) -\frac{4}{3} = y + \frac{5}{3}x$$
$$-27y - 96 = 30x$$

$$316) 28x - 200 = -64y$$
$$-64y = 33x - 110$$

$$317) -1 - \frac{11}{131}y - \frac{1}{131}x = 0$$
$$-58 = -38y - 46x$$

$$318) 0 = -61 - 47y - 80x$$
$$-40x = 86 + 42y$$



$$319) \begin{aligned} 0 &= 90 + 111x + 9y \\ 74x + y &= -10 \end{aligned}$$

$$320) \begin{aligned} -14x &= 88y - 52 \\ 132y &= 78 - 21x \end{aligned}$$

$$321) \begin{aligned} -\frac{11}{7}y &= -x - \frac{17}{7} \\ 33y &= 21x + 72 \end{aligned}$$

$$322) \begin{aligned} -\frac{1}{10}y - \frac{14}{5} &= -x \\ -4y - 72 &= -40x \end{aligned}$$

$$\begin{aligned} 323) \quad & -25x + 12y = -43 \\ & 19 = -46y + 75x \end{aligned}$$

$$\begin{aligned} 324) \quad & 60y = -3 + 141x \\ & 0 = -1 + \frac{10}{13}y - \frac{47}{26}x \end{aligned}$$

$$\begin{aligned} 325) \quad & 0 = 31y - 12x + 8 \\ & \frac{27}{4} + \frac{31}{4}y = 3x \end{aligned}$$

$$\begin{aligned} 326) \quad & 108 = 18y + 3x \\ & -\frac{1}{13} + \frac{15}{13}x = -y \end{aligned}$$

$$327) \begin{aligned} 58y &= 20x - 70 \\ 0 &= 57 + 29y - 8x \end{aligned}$$

$$328) \begin{aligned} 3y &= \frac{73}{13} - \frac{74}{13}x \\ -60y + 81 &= 111x \end{aligned}$$

$$329) \begin{aligned} 0 &= 16y + 32x - 112 \\ 21y &= -64x - 7 \end{aligned}$$

$$330) \begin{aligned} y &= -\frac{116}{7} - \frac{88}{7}x \\ -12 + 44x - 14y &= 0 \end{aligned}$$

$$331) -5y + 91 = -86x$$

$$2x + \frac{14}{43} = -\frac{72}{43}y$$

$$332) 14x = 46 - 3y$$

$$-4y = -24 + 28x$$

$$333) 0 = 14y + 22x - 6$$

$$-132x = 69y - 171$$

$$334) 18x + 146 = -5y$$

$$188 = -40y - 4x$$

$$335) \begin{aligned} -432 &= 45y + 21x \\ -2x + 6y &= 0 \end{aligned}$$

$$336) \begin{aligned} 1 - \frac{19}{34}x &= \frac{16}{17}y \\ 0 &= -32y - 21x - 50 \end{aligned}$$

$$337) \begin{aligned} -16x + 96 + 86y &= 0 \\ -43y - 8x + 48 &= 0 \end{aligned}$$

$$338) \begin{aligned} -4y &= 28 - 12x \\ x - \frac{5}{12}y &= -\frac{4}{3} \end{aligned}$$

$$339) \begin{aligned} -111y &= -81 + 27x \\ 0 &= 24y - 27x + 81 \end{aligned}$$

$$340) \begin{aligned} 3x &= -\frac{7}{3}y + \frac{7}{3} \\ 0 &= -90x - 43y + 43 \end{aligned}$$

$$341) \begin{aligned} -50 - 35y &= 25x \\ 27x - 107 &= -70y \end{aligned}$$

$$342) \begin{aligned} 142 &= -54y + 43x \\ 81y &= -57 + 84x \end{aligned}$$

$$343) \begin{aligned} 11y + 96x &= -52 \\ -48x - 84 + 9y &= 0 \end{aligned}$$

$$344) \begin{aligned} -46x + 30 + 28y &= 0 \\ 42x &= 7y - 84 \end{aligned}$$

$$345) \begin{aligned} y + \frac{8}{13}x + \frac{29}{13} &= 0 \\ -26y &= 40x + 106 \end{aligned}$$

$$346) \begin{aligned} 52y + 34 &= -14x \\ 59 + 26y &= -9x \end{aligned}$$

$$\begin{aligned} 347) \quad & -7x = 8y - 83 \\ & 149 = -5x + 2y \end{aligned}$$

$$\begin{aligned} 348) \quad & -2x - 40y = -16 \\ & 8 + 20y = x \end{aligned}$$

$$\begin{aligned} 349) \quad & 94 + 40x = -7y \\ & -18y = -4 - 20x \end{aligned}$$

$$\begin{aligned} 350) \quad & y + \frac{18}{5} = -\frac{1}{5}x \\ & 0 = 120y - 208 - 56x \end{aligned}$$



$$351) \begin{aligned} -36y + 144 &= -36x \\ -x &= 4 - y \end{aligned}$$

$$352) \begin{aligned} 67 &= 5x + 47y \\ 0 &= -10x + 124 - 94y \end{aligned}$$

$$353) \begin{aligned} 14x - 40y &= -68 \\ 28x &= 80y - 84 \end{aligned}$$

$$354) \begin{aligned} -7x + 5 + 5y &= 0 \\ 28x &= 20y - 8 \end{aligned}$$

$$355) \begin{aligned} -82 - 26y &= -19x \\ 13y + 122 &= 14x \end{aligned}$$

$$356) \begin{aligned} 10x + 21y + 31 &= 0 \\ -18 - 8y &= 10x \end{aligned}$$

$$357) \begin{aligned} -81y &= 207 - 72x \\ 0 &= -16y + 48 - 8x \end{aligned}$$

$$358) \begin{aligned} -20y &= 88 + 37x \\ -5y &= 40x + 145 \end{aligned}$$

$$359) \begin{aligned} -99x + 60y &= 384 \\ 9 &= 21y - 66x \end{aligned}$$

$$360) \begin{aligned} 99 &= 63y - 36x \\ -\frac{2}{9}x + \frac{7}{27}y &= 1 \end{aligned}$$

$$361) \begin{aligned} 0 &= 147 + 16x - 3y \\ 48x &= 21y - 69 \end{aligned}$$

$$362) \begin{aligned} -2 + 86x &= 14y \\ 43x + 53 &= 16y \end{aligned}$$

$$363) \begin{aligned} 0 &= -202 - 64x + 74y \\ 72x + 148y &= 4 \end{aligned}$$

$$364) \begin{aligned} -3 + 23x + 11y &= 0 \\ -1 - \frac{23}{13}x - \frac{41}{39}y &= 0 \end{aligned}$$

$$365) \begin{aligned} 0 &= 102 - 100x + 2y \\ -49 &= 31y - 18x \end{aligned}$$

$$366) \begin{aligned} -8 - 32x &= 40y \\ -20y + 47x &= 67 \end{aligned}$$

$$\begin{aligned} 367) \quad 0 &= 104 + 4x + 42y \\ 21y - 108 &= -12x \end{aligned}$$

$$\begin{aligned} 368) \quad 19x - 18y - 79 &= 0 \\ -54 &= 2x + 2y \end{aligned}$$

$$\begin{aligned} 369) \quad 24 + 222y &= -84x \\ 3 + \frac{111}{68}y + \frac{12}{17}x &= 0 \end{aligned}$$

$$\begin{aligned} 370) \quad 0 &= -1 - \frac{30}{143}x + \frac{29}{143}y \\ -24y &= -60x - 48 \end{aligned}$$

$$\begin{aligned} 371) \quad & -27y = 40x - 54 \\ & -28 = 80x - 14y \end{aligned}$$

$$\begin{aligned} 372) \quad & 120 + 60y = -7x \\ & 36y = -72 - 96x \end{aligned}$$

$$\begin{aligned} 373) \quad & \frac{21}{67}y = 3 + \frac{87}{134}x \\ & \frac{168}{37} = -3y + \frac{174}{37}x \end{aligned}$$

$$\begin{aligned} 374) \quad & -y - \frac{27}{43} + \frac{8}{43}x = 0 \\ & -\frac{49}{86}x = -y + \frac{6}{43} \end{aligned}$$

$$\begin{aligned} 375) \quad & 11 - y = 13x \\ & 69 = 12x - 3y \end{aligned}$$

$$\begin{aligned} 376) \quad & -34y = -9x + 95 \\ & -3 + \frac{105}{139}x = \frac{51}{139}y \end{aligned}$$

$$\begin{aligned} 377) \quad & -20x + 136 = 24y \\ & -8y = -8x + 72 \end{aligned}$$

$$\begin{aligned} 378) \quad & 0 = y + \frac{43}{15}x - \frac{71}{15} \\ & -33x + 30y = -96 \end{aligned}$$

$$379) \frac{18}{11}y + \frac{1}{11}x = -1$$
$$-6x = 66 + 6y$$

$$380) 24y + 60 - 18x = 0$$
$$y = -76 - 36x$$

$$381) 70x + 130 + 60y = 0$$
$$-130 = 70x + 60y$$

$$382) \frac{77}{25} = -x - \frac{11}{25}y$$
$$\frac{25}{13}x + \frac{9}{13}y = -1$$



$$383) 148 = 42x + 52y$$

$$x + \frac{26}{21}y = \frac{53}{21}$$

$$384) 52x + 56y = 136$$

$$-42 + 28y = -26x$$

$$385) 114x + 210 = 30y$$

$$105 = 15y + 19x$$

$$386) 93y = 21 - 15x$$

$$2y + \frac{10}{31}x + \frac{58}{31} = 0$$

$$387) \begin{aligned} -15x &= -426 + 36y \\ -60 &= -3x - 6y \end{aligned}$$

$$388) \begin{aligned} 10y &= 44 + 4x \\ 120x + 81y &= 204 \end{aligned}$$

$$389) \begin{aligned} 9y - 43x + 129 &= 0 \\ y &= \frac{19}{6} - \frac{19}{18}x \end{aligned}$$

$$390) \begin{aligned} -109 &= -11y + 38x \\ 46 - 44y - 43x &= 0 \end{aligned}$$

$$\begin{aligned} 391) \quad & -90 - 7y = -10x \\ & 28y - 50x = -100 \end{aligned}$$

$$\begin{aligned} 392) \quad & -26y - 133 = -27x \\ & 0 = 52y + 15x + 59 \end{aligned}$$

$$\begin{aligned} 393) \quad & -16x = -42y - 72 \\ & 0 = -1 - \frac{13}{36}x + \frac{7}{6}y \end{aligned}$$

$$\begin{aligned} 394) \quad & -28x = -41y - 64 \\ & 138x + 36 = 246y \end{aligned}$$

$$395) \quad 0 = -y - \frac{4}{37}x - \frac{23}{37}$$
$$-x - 51 + 36y = 0$$

$$396) \quad -29x - 28y = 104$$
$$108x = -42y + 360$$

$$397) \quad 82x = -y$$
$$41x - 2y = 0$$

$$398) \quad y + \frac{24}{7}x = \frac{10}{7}$$
$$-28 = -10y - 36x$$

$$399) 0 = -x + \frac{22}{5} - \frac{9}{10}y$$
$$-9y = -55 - x$$

$$400) 0 = 18 - 24x + 6y$$
$$-x = -\frac{7}{3} + \frac{4}{3}y$$

$$401) 0 = -200y + 47x + 177$$
$$0 = -64x + 100y + 276$$

$$402) -74y + 97 = -49x$$
$$-286 = -2x + 148y$$

$$\begin{aligned} 403) \quad & -9x - 74 - 46y = 0 \\ & 138y = -178 - 26x \end{aligned}$$

$$\begin{aligned} 404) \quad & 64x - 64 = -87y \\ & 134y - 256x = -256 \end{aligned}$$

$$\begin{aligned} 405) \quad & 55x + 87 + 78y = 0 \\ & -29y + 14 = 5x \end{aligned}$$

$$\begin{aligned} 406) \quad & 102x + 51 = -51y \\ & 250 = 34y - 3x \end{aligned}$$

$$407) \begin{aligned} 64 - 168x &= 80y \\ -20y - 212 &= 36x \end{aligned}$$

$$408) \begin{aligned} 214 &= -86y + 116x \\ 45y &= 29x + 205 \end{aligned}$$

$$409) \begin{aligned} \frac{46}{29}y &= -x - \frac{152}{29} \\ -154 - 92y - 43x &= 0 \end{aligned}$$

$$410) \begin{aligned} -232 &= 100y + 66x \\ 60 &= -200y + 70x \end{aligned}$$

$$411) \begin{aligned} -105 &= 210x + 105y \\ -45 &= 30x + 15y \end{aligned}$$

$$412) \begin{aligned} 40y &= 136x + 264 \\ -\frac{9}{34}y &= -x - \frac{79}{17} \end{aligned}$$

$$413) \begin{aligned} -525 - 1275y + 180x &= 0 \\ y + \frac{23}{85} - \frac{12}{85}x &= 0 \end{aligned}$$

$$414) \begin{aligned} x - \frac{17}{19} &= -\frac{45}{19}y \\ y + \frac{19}{45}x &= -\frac{2}{45} \end{aligned}$$



$$415) 49x = 28y - 21$$

$$-\frac{7}{3}x = 1 - \frac{4}{3}y$$

$$416) 66 - 6y = -89x$$

$$-36y = -396 - 534x$$

$$417) 66x = 166 - 124y$$

$$-113 = -62y - 27x$$

$$418) -156y - 176x = 244$$

$$-223 - 13y - 4x = 0$$

$$419) -\frac{41}{33}x - \frac{13}{33}y = 1$$
$$82x = -24y + 40$$

$$420) -8y = 108 + 98x$$
$$196x + 29 = -33y$$

$$421) 0 = 25y - 243 - 66x$$
$$0 = 3x - 186 + 12y$$

$$422) -142y - 228 = 124x$$
$$-83x = -223 + 142y$$

$$423) \begin{aligned} 156 + 33y &= -57x \\ -85x &= 66y - 36 \end{aligned}$$

$$424) \begin{aligned} 120y &= -95x + 120 \\ \frac{12}{11} &= x + \frac{12}{11}y \end{aligned}$$

$$425) \begin{aligned} 44y &= 8x + 136 \\ -24 + 264y + 84x &= 0 \end{aligned}$$

$$426) \begin{aligned} 86x + 14y - 292 &= 0 \\ 0 &= -34 + 3x - y \end{aligned}$$

$$\begin{aligned} 427) \quad & -64y = -35x + 184 \\ & 40 - 32y + 23x = 0 \end{aligned}$$

$$\begin{aligned} 428) \quad & \frac{11}{42}x = -1 - \frac{4}{21}y \\ & x = -\frac{52}{33} - \frac{23}{33}y \end{aligned}$$

$$\begin{aligned} 429) \quad & -47x = -149 - 16y \\ & -278 - 46x = 2y \end{aligned}$$

$$\begin{aligned} 430) \quad & -x = -\frac{1}{7}y + \frac{2}{7} \\ & -150 = -140x + 58y \end{aligned}$$

$$431) \begin{aligned} -38y - 218 &= 168x \\ 151 - 23y &= 84x \end{aligned}$$

$$432) \begin{aligned} 0 &= 58x - 51y - 292 \\ 138 + 39y &= 87x \end{aligned}$$

$$433) \begin{aligned} 71x &= -30y - 51 \\ -1 - \frac{1}{3}y - \frac{7}{9}x &= 0 \end{aligned}$$

$$434) \begin{aligned} 0 &= 73y - 43x + 137 \\ 126 + 91x &= 146y \end{aligned}$$

$$\begin{aligned} 435) \quad & -251 - 44x = 59y \\ & 384 + 24y - 264x = 0 \end{aligned}$$

$$\begin{aligned} 436) \quad & -60y = -55x + 45 \\ & -195 = -120y + 91x \end{aligned}$$

$$\begin{aligned} 437) \quad & -84x = 84 + 61y \\ & y + 42x + 42 = 0 \end{aligned}$$

$$\begin{aligned} 438) \quad & x - \frac{162}{79} = -\frac{12}{79}y \\ & -693 - 9y = 195x \end{aligned}$$

$$439) \begin{aligned} 0 &= 33x + 67y \\ 11x + 27y &= -154 \end{aligned}$$

$$440) \begin{aligned} -90x + 17y &= 41 \\ 226 &= 180x - 38y \end{aligned}$$

$$441) \begin{aligned} 162y - 67x - 296 &= 0 \\ 27 &= 243y + 108x \end{aligned}$$

$$442) \begin{aligned} 106y - 216 &= 92x \\ 46x &= -154 + 53y \end{aligned}$$

$$\begin{aligned} 443) \quad 0 &= 232 + 98x - 184y \\ 116 - 92y &= -49x \end{aligned}$$

$$\begin{aligned} 444) \quad -204 &= 462x - 300y \\ -34 &= 77x - 50y \end{aligned}$$

$$\begin{aligned} 445) \quad -70x - 10 + 45y &= 0 \\ -9y + 21x &= -93 \end{aligned}$$

$$\begin{aligned} 446) \quad -17x + 7 &= 22y \\ 28y + 158 &= 34x \end{aligned}$$



$$447) \begin{aligned} -29y - 84x + 159 &= 0 \\ -48 - 17y &= 21x \end{aligned}$$

$$448) \begin{aligned} 0 &= -83x + 31y + 186 \\ -114 - 166x &= 19y \end{aligned}$$

$$449) \begin{aligned} 0 &= -64x - 112y + 16 \\ -y - \frac{83}{56} &= -\frac{27}{112}x \end{aligned}$$

$$450) \begin{aligned} 168x &= -840 + 315y \\ x &= -5 - \frac{35}{54}y \end{aligned}$$

$$451) \begin{aligned} 166 - 26y - 2x &= 0 \\ 60y - 12x &= 300 \end{aligned}$$

$$452) \begin{aligned} \frac{71}{91}x &= y - \frac{57}{91} \\ -\frac{71}{57}x &= 1 - \frac{91}{57}y \end{aligned}$$

$$453) \begin{aligned} 13y + 108x + 108 &= 0 \\ -27x - 27 &= -56y \end{aligned}$$

$$454) \begin{aligned} -95y - 95 &= -4x \\ -190y &= -65x + 190 \end{aligned}$$

$$455) \quad 2x - 50 = 16y$$
$$-y + \frac{5}{56}x = -\frac{19}{56}$$

$$456) \quad -10x - 33y = 102$$
$$0 = -x + \frac{213}{49} - \frac{132}{49}y$$

$$457) \quad -186 = -24x + 31y$$
$$10y = -572 + 16x$$

$$458) \quad -120 + 9y = 129x$$
$$y = \frac{43}{77}x - \frac{34}{77}$$

$$\begin{aligned} 459) \quad & -264x + 174y = -438 \\ & -142 + 176x = -34y \end{aligned}$$

$$\begin{aligned} 460) \quad & -3y = \frac{17}{3}x + \frac{35}{3} \\ & 160 - 92x = 72y \end{aligned}$$

$$\begin{aligned} 461) \quad & -58y - 272 = 2x \\ & -12x + 272 = 76y \end{aligned}$$

$$\begin{aligned} 462) \quad & 1 = \frac{31}{105}x - \frac{4}{35}y \\ & 188y - 124x = -560 \end{aligned}$$

$$463) \quad 204x - 2y = -176$$
$$-\frac{34}{25}x = -2 - \frac{6}{25}y$$

$$464) \quad -y - 67 = -x$$
$$34y = -378 - 4x$$

$$465) \quad -12 - 15x - 9y = 0$$
$$-166x - 90y = -424$$

$$466) \quad -186 - 102x = 37y$$
$$30y = 588 + 102x$$

$$\begin{aligned} 467) \quad & 63x = 252 + 14y \\ & 270 = 126x - 54y \end{aligned}$$

$$\begin{aligned} 468) \quad & -46x = -114 - 50y \\ & 0 = 23x - 48y + 81 \end{aligned}$$

$$\begin{aligned} 469) \quad & 0 = 9y + 87 - 60x \\ & 0 = -15x + 2y + 11 \end{aligned}$$

$$\begin{aligned} 470) \quad & -69y - 53x - 218 = 0 \\ & -61 = -106x - 67y \end{aligned}$$

$$471) 144x - 282y + 138 = 0$$

$$-x + \frac{47}{83}y + \frac{36}{83} = 0$$

$$472) -20y + x = 176$$

$$33x = -264 - 99y$$

$$473) 80 - 76x = 48y$$

$$144y - 240 + 228x = 0$$

$$474) x = -\frac{98}{37}y - \frac{196}{37}$$

$$53y = 111x - 106$$

$$475) \begin{aligned} 0 &= -73y - 75x + 6 \\ 12 - 146y &= 150x \end{aligned}$$

$$476) \begin{aligned} -93 + 53y &= 6x \\ 558 + 36x &= 318y \end{aligned}$$

$$477) \begin{aligned} \frac{10}{7} &= -2y + \frac{29}{14}x \\ -168y + 174x &= 114 \end{aligned}$$

$$478) \begin{aligned} 190y &= 380 + 240x \\ -60x + 23y &= 46 \end{aligned}$$



$$479) \begin{aligned} 18y + 76x &= -62 \\ 91 &= 3y - 38x \end{aligned}$$

$$480) \begin{aligned} y - \frac{26}{31}x &= \frac{123}{31} \\ 31y + 99 - 63x &= 0 \end{aligned}$$

$$481) \begin{aligned} -222 - 25y &= -86x \\ -2 &= -\frac{43}{25}x - \frac{18}{25}y \end{aligned}$$

$$482) \begin{aligned} 0 &= -34x - 4y + 360 \\ -\frac{52}{59}y + \frac{84}{59} &= x \end{aligned}$$

$$483) 6y - 68 = 166x$$

$$\frac{8}{83}y = x + \frac{229}{83}$$

$$484) 0 = 45y - 26x - 64$$

$$28 + 12y = 52x$$

$$485) -61x - 11y - 67 = 0$$

$$92 = 244x + 116y$$

$$486) -84 = -66y + 318x$$

$$-53x = 49 - 12y$$

$$487) -90 + x - 28y = 0$$

$$y - \frac{60}{29} = \frac{8}{29}x$$

$$488) -17y + 66 = -83x$$

$$2y - \frac{33}{25} = \frac{83}{25}x$$

$$489) -81x - 32y = -257$$

$$-52y - 162x = 38$$

$$490) 150 + 44x - 10y = 0$$

$$-y + 1 + \frac{8}{5}x = 0$$

$$491) \begin{aligned} 5y + 99x &= -49 \\ -58y + 184 &= 396x \end{aligned}$$

$$492) \begin{aligned} 135x + 192y &= -270 \\ 162 + 128y &= -81x \end{aligned}$$

$$493) \begin{aligned} 0 &= 90y + 225 - 105x \\ 15x + 109 &= 2y \end{aligned}$$

$$494) \begin{aligned} 12y - 232 &= -80x \\ -30y &= -220 + 20x \end{aligned}$$

$$495) \begin{aligned} -11x &= -22y + 143 \\ 0 &= 50 + 110y - 10x \end{aligned}$$

$$496) \begin{aligned} 10y &= 5x - 5 \\ x &= \frac{14}{19}y - \frac{5}{19} \end{aligned}$$

$$497) \begin{aligned} -16y + 432 &= 40x \\ x + \frac{12}{25}y &= \frac{74}{25} \end{aligned}$$

$$498) \begin{aligned} 0 &= 39x + 174 - 87y \\ -1 - \frac{117}{128}x + \frac{1}{2}y &= 0 \end{aligned}$$

$$499) \quad -48 + 37x + 25y = 0$$
$$-\frac{37}{112}x - \frac{9}{112}y = -1$$

$$500) \quad -2 - \frac{50}{73}y = -\frac{24}{73}x$$
$$-1 + \frac{12}{23}x + \frac{25}{23}y = 0$$

## Systems of equations - Elimination - advanced

**Solve by using elimination method**

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

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

$$(1, 0)$$

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

$$-y - 4x = 7$$

$$(-1, -3)$$

$$\begin{aligned} 3) \quad & -3y + 3 = -3x \\ & 12x + 9y = 30 \end{aligned}$$

$$(1, 2)$$

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

$$(-3, 3)$$

$$\begin{aligned} 5) \quad & -y = 8 + 3x \\ & 0 = 5 + 2x + y \end{aligned}$$

$$(-3, 1)$$

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

$$(0, -3)$$



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

$$y - 3 = 2x$$

$$(-1, 1)$$

$$8) -6x - 6y + 12 = 0$$

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

$$(0, 2)$$

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

$$4x + 2y = 8$$

$$(0, 4)$$

$$10) 0 = -3x - 4y$$

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

$$(-4, 3)$$

$$\begin{aligned} 11) \quad & -x = -y - 3 \\ & -6y - 3x = -9 \\ & (3, 0) \end{aligned}$$

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

$$\begin{aligned} 13) \quad & 0 = x + 2y \\ & 1 + x = -y \\ & (-2, 1) \end{aligned}$$

$$\begin{aligned} 14) \quad & 5 - 2y + x = 0 \\ & 6y = 12 + 3x \\ & \text{No solution} \end{aligned}$$

$$15) \begin{aligned} 1 &= -x + y \\ -2y + 2 &= -2x \end{aligned}$$

Infinite number of solutions

$$16) \begin{aligned} 3y &= -24 + 6x \\ 2x &= y + 8 \end{aligned}$$

Infinite number of solutions

$$17) \begin{aligned} 4x + 4y &= 8 \\ 4y - 4 + 4x &= 0 \end{aligned}$$

No solution

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

(2, 4)

$$19) \begin{aligned} -2x &= -4 + 2y \\ -4y - x + 5 &= 0 \end{aligned}$$

$$(1, 1)$$

$$20) \begin{aligned} 6 + 2x - y &= 0 \\ 0 &= y + 2x + 10 \end{aligned}$$

$$(-4, -2)$$

$$21) \begin{aligned} -y - 2x &= -4 \\ 0 &= -6x + 12 - 2y \end{aligned}$$

$$(2, 0)$$

$$22) \begin{aligned} 12 + 2x + 2y &= 0 \\ 0 &= 4y - 4x \end{aligned}$$

$$(-3, -3)$$

$$23) \quad x = 7 - 4y$$

$$2y + x = 3$$

$$(-1, 2)$$

$$24) \quad 2x = y + 6$$

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

$$(1, -4)$$

$$25) \quad y = -2x - 4$$

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

$$(-3, 2)$$

$$26) \quad -1 = 3x - y$$

$$0 = -5 - y - 3x$$

$$(-1, -2)$$

$$\begin{aligned} 27) \quad & 12y = -6x \\ & -4y + 4x = -12 \\ & (-2, 1) \end{aligned}$$

$$\begin{aligned} 28) \quad & -\frac{1}{10}y = 1 + \frac{2}{5}x \\ & -8x = 24 + 4y \\ & (-2, -2) \end{aligned}$$

$$\begin{aligned} 29) \quad & 8 - 4y = -4x \\ & 7 - 2y = x \\ & (1, 3) \end{aligned}$$

$$\begin{aligned} 30) \quad & -x = -4y + 5 \\ & -\frac{4}{3}y - \frac{1}{3}x = -1 \\ & (-1, 1) \end{aligned}$$

$$\begin{aligned} 31) \quad & x = y \\ & -y = -3x - 6 \\ & (-3, -3) \end{aligned}$$

$$\begin{aligned} 32) \quad & 0 = -22 - 2y + 6x \\ & -4y = -1 + 3x \\ & (3, -2) \end{aligned}$$

$$\begin{aligned} 33) \quad & -3x = 4y \\ & 0 = -2y + 3x \\ & (0, 0) \end{aligned}$$

$$\begin{aligned} 34) \quad & 3x = 6 + 4y \\ & 0 = 2y + 18 + 6x \\ & (-2, -3) \end{aligned}$$

$$35) \begin{aligned} -5 - y &= -x \\ x + y &= -3 \end{aligned}$$

$$(1, -4)$$

$$36) \begin{aligned} -4x &= -2 + 3y \\ 6y &= 12x + 24 \end{aligned}$$

$$(-1, 2)$$

$$37) \begin{aligned} -2x &= -4 + 2y \\ -x - \frac{1}{2}y &= -2 \end{aligned}$$

$$(2, 0)$$

$$38) \begin{aligned} 15 + 6y &= 3x \\ 3x - 2y &= -1 \end{aligned}$$

$$(-3, -4)$$



$$39) \begin{aligned} -2y - x &= 1 \\ 3x - 9 &= 6y \end{aligned}$$

$$(1, -1)$$

$$40) 2x + 6 = 2y$$

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

$$(-3, 0)$$

$$41) \begin{aligned} x + 4y &= -3 \\ 0 &= 9 + 4y + 3x \end{aligned}$$

$$(-3, 0)$$

$$42) 2x = -2 - 4y$$

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

$$(3, -2)$$

$$43) \begin{aligned} -8 &= 6x + 4y \\ -6x - 18 &= -6y \end{aligned}$$

$(-2, 1)$

$$44) \begin{aligned} 2x + 10 &= -4y \\ -12 &= 2x + 4y \end{aligned}$$

No solution

$$45) \begin{aligned} 3y + 2x &= 3 \\ -\frac{1}{2}x &= -1 + y \end{aligned}$$

$(0, 1)$

$$46) \begin{aligned} -y &= -3x + 7 \\ y - 3x &= -5 \end{aligned}$$

No solution

$$47) \begin{aligned} 0 &= -y + 2 + 3x \\ -4 + y &= 3x \end{aligned}$$

No solution

$$48) \begin{aligned} 2x - 4y &= -2 \\ 3x - 3 - 3y &= 0 \end{aligned}$$

(3, 2)

$$49) \begin{aligned} -4y + 24 - 6x &= 0 \\ -2y + 3x &= 12 \end{aligned}$$

(4, 0)

$$50) \begin{aligned} 3y &= 9 - 3x \\ -\frac{1}{3}y &= -1 + \frac{1}{3}x \end{aligned}$$

Infinite number of solutions

$$51) \begin{aligned} 4 &= -2y - 3x \\ -4x - 2y - 4 &= 0 \end{aligned}$$

$$(0, -2)$$

$$52) \begin{aligned} x + 4 &= 4y \\ 12 - 4y - x &= 0 \end{aligned}$$

$$(4, 2)$$

$$53) \begin{aligned} y &= 1 - x \\ y + 3 - 3x &= 0 \end{aligned}$$

$$(1, 0)$$

$$54) \begin{aligned} -x + 1 &= -2y \\ -3y &= x + 4 \end{aligned}$$

$$(-1, -1)$$

$$55) \begin{aligned} 0 &= 11 - 4x + 3y \\ 3y + 3x - 3 &= 0 \end{aligned}$$

$$(2, -1)$$

$$56) -1 + \frac{1}{2}x = -y$$

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

$$(4, -1)$$

$$57) \begin{aligned} 1 + \frac{3}{11}y &= \frac{2}{11}x \\ -3y &= -3x + 15 \end{aligned}$$

$$(4, -1)$$

$$58) \begin{aligned} 0 &= 4y + 4x \\ -\frac{3}{4} + \frac{1}{4}x &= -y \end{aligned}$$

$$(-1, 1)$$

$$59) -\frac{1}{3}y = -1 - \frac{1}{3}x$$
$$-2x = 3y + 6$$
$$(-3, 0)$$

$$60) -3x = -8 + y$$
$$2x - 12 = y$$
$$(4, -4)$$

$$61) -4x - 12 = 4y$$
$$0 = 3 + y - \frac{3}{4}x$$
$$(0, -3)$$

$$62) -2x = 4y - 10$$
$$2x = 4y + 2$$
$$(3, 1)$$

$$63) \begin{aligned} -4y + 4 + 4x &= 0 \\ -4x + 2y - 10 &= 0 \end{aligned}$$

$$(-4, -3)$$

$$64) \begin{aligned} -6x &= 6y \\ -3y &= 2x - 1 \end{aligned}$$

$$(-1, 1)$$

$$65) \begin{aligned} 3 &= -y + x \\ -3 &= x + y \end{aligned}$$

$$(0, -3)$$

$$66) \begin{aligned} -3 &= -3x + 3y \\ -1 + x - 3y &= 0 \end{aligned}$$

$$(1, 0)$$

$$67) \begin{aligned} -1 + y - x &= 0 \\ -x &= -3y + 9 \end{aligned}$$

$$(3, 4)$$

$$68) \begin{aligned} 2y + 3x &= -4 \\ 0 &= x + 4 - 2y \end{aligned}$$

$$(-2, 1)$$

$$69) \begin{aligned} 0 &= x + \frac{4}{3}y + \frac{7}{3} \\ 0 &= 3x + 4 + y \end{aligned}$$

$$(-1, -1)$$

$$70) \begin{aligned} 3 - 3y + 3x &= 0 \\ y &= \frac{7}{3} + \frac{1}{3}x \end{aligned}$$

$$(2, 3)$$



$$71) \begin{aligned} 16 + 8x &= 4y \\ -24 - 6y &= 12x \end{aligned}$$

$$(-2, 0)$$

$$72) \begin{aligned} 8y &= 8x - 24 \\ 0 &= 12 - y - 4x \end{aligned}$$

$$(3, 0)$$

$$73) \begin{aligned} 0 &= 4x - 8 + 2y \\ 0 &= 2y - 8 - 4x \end{aligned}$$

$$(0, 4)$$

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

$$(-1, -1)$$

$$\begin{aligned} 75) \quad & 8 = 2y + x \\ & -7 + x = -2y \end{aligned}$$

**No solution**

$$\begin{aligned} 76) \quad & 12 + x = -4y \\ & -4y = 12 + x \end{aligned}$$

**Infinite number of solutions**

$$\begin{aligned} 77) \quad & 2x - 8 = -y \\ & -2x + 6 = y \end{aligned}$$

**No solution**

$$\begin{aligned} 78) \quad & 0 = 3x - 3y \\ & -3x - 1 = -4y \end{aligned}$$

**(1, 1)**

$$79) \begin{aligned} -1 + 3x + y &= 0 \\ y + 2 + 3x &= 0 \end{aligned}$$

No solution

$$80) 0 = -8 - y - 2x$$

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

Infinite number of solutions

$$81) \begin{aligned} y &= 12 + 3x \\ 3 &= -3x - 2y \end{aligned}$$

$(-3, 3)$

$$82) 2x - 6 + 4y = 0$$

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

$(3, 0)$

$$83) \begin{aligned} 0 &= x - 11 + 4y \\ -3y &= -x - 3 \end{aligned}$$

$$(3, 2)$$

$$84) \begin{aligned} 0 &= 5 - 4y - 3x \\ 3y &= 15 + 9x \end{aligned}$$

$$(-1, 2)$$

$$85) \begin{aligned} 7 &= -x - 4y \\ -3x &= 9 + 6y \end{aligned}$$

$$(1, -2)$$

$$86) \begin{aligned} 0 &= -3x - 6 + 2y \\ -y + 3x &= -3 \end{aligned}$$

$$(0, 3)$$

$$\begin{aligned} 87) \quad & -y = x \\ & -y = 4x - 6 \\ & (2, -2) \end{aligned}$$

$$\begin{aligned} 88) \quad & 4 + 4y = -6x \\ & 8 - 2y = -2x \\ & (-2, 2) \end{aligned}$$

$$\begin{aligned} 89) \quad & -2y + 3x = 5 \\ & 0 = x - 7 + 2y \\ & (3, 2) \end{aligned}$$

$$\begin{aligned} 90) \quad & -y + x - 2 = 0 \\ & 3x + 2 + y = 0 \\ & (0, -2) \end{aligned}$$

$$\begin{aligned} 91) \quad & -y + x = 0 \\ & -9 = 2y + x \\ & (-3, -3) \end{aligned}$$

$$\begin{aligned} 92) \quad & -3y = x + 2 \\ & 0 = 2 + 2y + x \\ & (-2, 0) \end{aligned}$$

$$\begin{aligned} 93) \quad & -x + 11 = 2y \\ & 0 = -x + y - 1 \\ & (3, 4) \end{aligned}$$

$$\begin{aligned} 94) \quad & y - 2 = 2x \\ & y = 2 - 4x \\ & (0, 2) \end{aligned}$$

$$95) \begin{aligned} 4y - 2x - 8 &= 0 \\ -x &= -4y + 10 \end{aligned}$$

$$(2, 3)$$

$$96) \begin{aligned} -2y + 4x &= 0 \\ -5 + 2y + x &= 0 \end{aligned}$$

$$(1, 2)$$

$$97) \begin{aligned} 3y - 15 - 3x &= 0 \\ -x + 1 &= 2y \end{aligned}$$

$$(-3, 2)$$

$$98) \begin{aligned} 0 &= -x + y \\ 2x &= -2y + 12 \end{aligned}$$

$$(3, 3)$$

$$99) \begin{aligned} 2 &= 2x - 4y \\ -4y - x &= -1 \end{aligned}$$

$$(1, 0)$$

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

$$(0, -2)$$

$$101) \begin{aligned} -3y &= -4x \\ -3y &= -6 - 2x \end{aligned}$$

$$(3, 4)$$

$$102) \begin{aligned} -x + 2y &= -6 \\ 0 &= 3x - 3y \end{aligned}$$

$$(-6, -6)$$



$$103) \begin{aligned} -6y &= -x + 4 \\ x + 7 + 5y &= 0 \end{aligned}$$

$$(-2, -1)$$

$$104) \begin{aligned} 6 + x - 3y &= 0 \\ 5y &= -x + 2 \end{aligned}$$

$$(-3, 1)$$

$$105) \begin{aligned} 0 &= y + \frac{2}{3}x + \frac{2}{3} \\ 1 &= -x - \frac{1}{4}y \end{aligned}$$

$$(-1, 0)$$

$$106) \begin{aligned} 0 &= 24 + 12x + 15y \\ 10y &= -34 - 8x \end{aligned}$$

No solution

$$107) \begin{aligned} -5y &= -10 + 6x \\ 0 &= -6x + 10 - 5y \end{aligned}$$

Infinite number of solutions

$$108) \begin{aligned} -6x &= 4y \\ 0 &= -4y - 6x - 10 \end{aligned}$$

No solution

$$109) \begin{aligned} -8y - 8 &= -4x \\ 12 + 12y &= 6x \end{aligned}$$

Infinite number of solutions

$$110) \begin{aligned} 4y &= 4x + 12 \\ 0 &= 30 + 18x - 12y \end{aligned}$$

(1, 4)

$$111) -5 = y + 5x$$

$$1 = -y - x$$

$$(-1, 0)$$

$$112) -y = 3x - 5$$

$$\frac{1}{2} = y + \frac{3}{4}x$$

$$(2, -1)$$

$$113) 0 = 12y + 27 + 9x$$

$$-1 + 5x = -4y$$

$$(5, -6)$$

$$114) 4x + 2y = 14$$

$$-4y = 10x - 34$$

$$(3, 1)$$

$$115) 0 = -y + 3x + 13$$

$$y - \frac{3}{2}x = \frac{17}{2}$$

$$(-3, 4)$$

$$116) 0 = -12 - 2x - 2y$$

$$-10y + 4x = 32$$

$$(-2, -4)$$

$$117) 2x - 6y - 18 = 0$$

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

$$(3, -2)$$

$$118) 10x = -12y - 8$$

$$3y = -7 - 5x$$

$$(-2, 1)$$

$$119) \begin{aligned} 0 &= 2x - y + 6 \\ -2x + 10 - 3y &= 0 \end{aligned}$$

$$(-1, 4)$$

$$120) \begin{aligned} -3 &= -y - \frac{3}{4}x \\ 16 &= 4x + 4y \end{aligned}$$

$$16 = 4x + 4y$$

$$(4, 0)$$

$$121) \begin{aligned} 0 &= 4 - y - 2x \\ -6y + 2x + 10 &= 0 \end{aligned}$$

$$(1, 2)$$

$$122) \begin{aligned} 3 &= 5y - 2x \\ 1 - 3y + 2x &= 0 \end{aligned}$$

$$(1, 1)$$

$$123) \begin{aligned} x &= 12 - 3y \\ 0 &= -3y + 12 + 5x \end{aligned}$$

$$(0, 4)$$

$$124) \begin{aligned} 2y + 4x &= -6 \\ y + 3x &= -2 \end{aligned}$$

$$(1, -5)$$

$$125) \begin{aligned} -36 &= 12x - 18y \\ 8 &= 4y - 4x \end{aligned}$$

$$(0, 2)$$

$$126) \begin{aligned} -x &= 4y \\ 4y + 12 - 2x &= 0 \end{aligned}$$

$$(4, -1)$$

$$127) \begin{aligned} -2 - 2y &= 3x \\ 0 &= -2x - 2y \end{aligned}$$

$$(-2, 2)$$

$$128) \begin{aligned} 0 &= 18 - 3y + 4x \\ -3y &= 18 + 2x \end{aligned}$$

$$(-6, -2)$$

$$129) \begin{aligned} 1 - \frac{1}{2}y &= \frac{1}{3}x \\ -3x - 6y &= -12 \end{aligned}$$

$$(0, 2)$$

$$130) \begin{aligned} 6y &= x \\ 2x &= -6y + 18 \end{aligned}$$

$$(6, 1)$$

$$131) \begin{aligned} 17 &= -3y + 2x \\ 0 &= 6x - 6y - 36 \end{aligned}$$

$$(1, -5)$$

$$132) \begin{aligned} -2y &= 2x \\ 16 &= 2x + 6y \end{aligned}$$

$$(-4, 4)$$

$$133) \begin{aligned} 18 - 6x &= y \\ 3 &= x - \frac{1}{3}y \end{aligned}$$

$$(3, 0)$$

$$134) \begin{aligned} 3x + 9y - 3 &= 0 \\ 3y + 4x - 13 &= 0 \end{aligned}$$

$$(4, -1)$$



$$135) -4x - 2y = -8$$

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

$$(0, 4)$$

$$136) 8x = 8 - 12y$$

$$-5y + 4 = 4x$$

$$(1, 0)$$

$$137) -1 = 5y + x$$

$$-1 = 5y + x$$

Infinite number of solutions

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

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

Infinite number of solutions

$$139) \begin{aligned} -10y + 8x + 14 &= 0 \\ -5y &= -7 - 4x \end{aligned}$$

Infinite number of solutions

$$140) \begin{aligned} -8x &= -8y + 8 \\ -14 &= 2x - 4y \end{aligned}$$

(5, 6)

$$141) \begin{aligned} \frac{3}{10}y - \frac{1}{10}x &= -1 \\ 2x &= 6y + 20 \end{aligned}$$

Infinite number of solutions

$$142) \begin{aligned} -16 - 5x &= -4y \\ 2x &= -4 + 4y \end{aligned}$$

(-4, -1)

$$143) \begin{aligned} 3x &= 18 - 9y \\ -7 &= -4y - x \end{aligned}$$

$$(3, 1)$$

$$144) \begin{aligned} -3x + 3y &= 9 \\ 4y - 2 &= -6x \end{aligned}$$

$$(-1, 2)$$

$$145) \begin{aligned} -16 + 6x &= 2y \\ 4 &= 2x - 2y \end{aligned}$$

$$(3, 1)$$

$$146) \begin{aligned} -y &= x - 2 \\ -6 + 2x + y &= 0 \end{aligned}$$

$$(4, -2)$$

$$147) \begin{aligned} 5 &= -3x - 5y \\ -5y &= 6x - 10 \end{aligned}$$

$$(5, -4)$$

$$148) \begin{aligned} -y &= -x - 9 \\ 3y + 33 &= -12x \end{aligned}$$

$$(-4, 5)$$

$$149) \begin{aligned} -4x - 4y &= 12 \\ 4 + 2y &= -4x \end{aligned}$$

$$(1, -4)$$

$$150) \begin{aligned} 6x - 4y + 8 &= 0 \\ 3x - 6y &= 12 \end{aligned}$$

$$(-4, -4)$$

$$151) -24 - 6y - 2x = 0$$

$$6y - 3x = -9$$

$$(-3, -3)$$

$$152) -4 - 4x = -4y$$

$$4y = 4 - 5x$$

$$(0, 1)$$

$$153) 2y - 6 - 4x = 0$$

$$5y - 9 = 4x$$

$$(-1, 1)$$

$$154) 0 = 4x - 5y - 14$$

$$3x - 13 = 5y$$

$$(1, -2)$$

$$155) -24 - 4y = -10x$$

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

$$(4, 4)$$

$$156) 6y + 16 + x = 0$$

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

$$(-4, -2)$$

$$157) 4x + 16 - 5y = 0$$

$$16 = 3y - 4x$$

$$(-4, 0)$$

$$158) 0 = -1 + \frac{1}{6}x - \frac{1}{3}y$$

$$-3y = 3x$$

$$(2, -2)$$

$$159) \begin{aligned} -4y + 1 + 3x &= 0 \\ 0 &= -15y + 9x + 15 \end{aligned}$$

(5, 4)

$$160) \begin{aligned} -3y &= x - 4 \\ -4y - 2x &= -8 \end{aligned}$$

(4, 0)

$$161) \begin{aligned} 13 - 3y &= -x \\ 2x - \frac{3}{2}y &= 1 \end{aligned}$$

(5, 6)

$$162) \begin{aligned} y + 2x - 10 &= 0 \\ -2x &= -10 + 5y \end{aligned}$$

(5, 0)

$$163) \quad 28 = 4x + 6y$$
$$1 - \frac{3}{8}y = -\frac{1}{2}x$$

$(1, 4)$

$$164) \quad 0 = -4x + 10y + 12$$
$$y - \frac{1}{2}x + \frac{3}{2} = 0$$

$(3, 0)$

$$165) \quad 0 = -6y - 3x - 6$$
$$-6y = 2x$$

$(-6, 2)$

$$166) \quad -4y + 3x = -16$$
$$-4y = -15 - 3x$$

No solution



$$167) \begin{aligned} 10 &= x + 4y \\ 4y &= 9 - x \end{aligned}$$

**No solution**

$$168) \begin{aligned} 6x &= -4y - 2 \\ -2 &= 6x + 4y \end{aligned}$$

**Infinite number of solutions**

$$169) \begin{aligned} -\frac{2}{7}x &= -1 - \frac{3}{14}y \\ -1 - \frac{3}{4}y &= -\frac{1}{2}x \end{aligned}$$

**(5, 2)**

$$170) \begin{aligned} 11 &= -4y - x \\ -4y &= x + 11 \end{aligned}$$

**Infinite number of solutions**

$$171) 0 = -5y - 3x - 7$$

$$11 + 5y = x$$

$(1, -2)$

$$172) -1 = \frac{3}{11}x - \frac{2}{11}y$$

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

No solution

$$173) 2y = -3 + 5x$$

$$6x = -6y + 54$$

$(3, 6)$

$$174) 2x + 2y = 16$$

$$2x - 14 = -y$$

$(6, 2)$

$$175) \begin{aligned} 0 &= -12y - 12x + 24 \\ 4x + 5y &= 12 \end{aligned}$$

$$(-2, 4)$$

$$176) \begin{aligned} \frac{3}{10}y &= -3 - \frac{3}{2}x \\ -4x + y &= 8 \end{aligned}$$

$$(-2, 0)$$

$$177) \begin{aligned} 3y - 5x - 8 &= 0 \\ 2y &= -5x - 3 \end{aligned}$$

$$(-1, 1)$$

$$178) \begin{aligned} -2x &= -y - 4 \\ 42 &= -6y + 18x \end{aligned}$$

$$(3, 2)$$

$$179) \begin{aligned} -x &= -9 - 2y \\ 2y - 3x &= -11 \end{aligned}$$

$$(1, -4)$$

$$180) \begin{aligned} 8 &= -4y + x \\ 2 - 2y - x &= 0 \end{aligned}$$

$$(4, -1)$$

$$181) \begin{aligned} 5x + 13 - y &= 0 \\ 0 &= -1 + \frac{1}{11}y - \frac{4}{11}x \end{aligned}$$

$$(-2, 3)$$

$$182) \begin{aligned} 0 &= -10 - 6y + 2x \\ -2x + 10 &= -4y \end{aligned}$$

$$(5, 0)$$

$$183) \begin{aligned} 2y &= x + 14 \\ 3x - 2y + 18 &= 0 \end{aligned}$$

$$(-2, 6)$$

$$184) \begin{aligned} 3x + 3 + y &= 0 \\ -4y &= 3x - 15 \end{aligned}$$

$$(-3, 6)$$

$$185) \begin{aligned} 2x &= -2y \\ 5 + 3x &= 2y \end{aligned}$$

$$(-1, 1)$$

$$186) \begin{aligned} 0 &= -12 + 6y - 6x \\ 14 + 3x + y &= 0 \end{aligned}$$

$$(-4, -2)$$

$$187) \begin{aligned} 0 &= 2x + 4 - 3y \\ -6y + 2x &= -16 \end{aligned}$$

$$(4, 4)$$

$$188) \begin{aligned} -4 &= 4y - 5x \\ -4 - 3x &= 4y \end{aligned}$$

$$(0, -1)$$

$$189) \begin{aligned} -4x + 10 &= -y \\ 9x &= 3y + 27 \end{aligned}$$

$$(1, -6)$$

$$190) \begin{aligned} 4x + 12 &= -2y \\ x &= -3 + 2y \end{aligned}$$

$$(-3, 0)$$

$$191) \begin{aligned} -6x + y - 13 &= 0 \\ 45 - 9y &= -18x \end{aligned}$$

$$(-2, 1)$$

$$192) \begin{aligned} 6x + 3y &= 18 \\ -4x - 3y + 16 &= 0 \end{aligned}$$

$$(1, 4)$$

$$193) \begin{aligned} 12 &= -5x - 3y \\ -9y - 6x &= -18 \end{aligned}$$

$$(-6, 6)$$

$$194) \begin{aligned} 1 + \frac{6}{5}y &= \frac{1}{5}x \\ 0 &= x + 3y + 4 \end{aligned}$$

$$(-1, -1)$$

$$195) \begin{aligned} 1 + 6x &= -5y \\ 6y - 18x - 24 &= 0 \end{aligned}$$

$(-1, 1)$

$$196) \begin{aligned} -6y + x - 18 &= 0 \\ -12y - 36 + 8x &= 0 \end{aligned}$$

$(0, -3)$

$$197) \begin{aligned} -11 + 6x + y &= 0 \\ 6x &= 11 - y \end{aligned}$$

Infinite number of solutions

$$198) \begin{aligned} 0 &= 7 + 2x - 3y \\ 3y - 2x - 7 &= 0 \end{aligned}$$

Infinite number of solutions



$$199) \begin{aligned} 2y - 4x &= -18 \\ -4x &= -2y - 18 \end{aligned}$$

Infinite number of solutions

$$200) 6 = -3y - \frac{12}{5}x$$

$$10 = -2x - 5y$$

(0, -2)

$$201) \begin{aligned} 10x - 42 + 16y &= 0 \\ -15x - 24y &= -24 \end{aligned}$$

No solution

$$202) \begin{aligned} -34 + 3x &= -8y \\ 2x - 4 &= -24y \end{aligned}$$

(14, -1)

$$\begin{aligned} 203) \quad & -9y = -6x \\ & -9x = 54 - 9y \end{aligned}$$

$$(-18, -12)$$

$$\begin{aligned} 204) \quad & -3y = -12x + 129 \\ & -19y = 2x + 37 \end{aligned}$$

$$(10, -3)$$

$$\begin{aligned} 205) \quad & -39 = 3x - 12y \\ & 0 = x + \frac{43}{11} - \frac{24}{11}y \end{aligned}$$

$$(7, 5)$$

$$\begin{aligned} 206) \quad & 14y = -57 - 5x \\ & -12 = 7y - 3x \end{aligned}$$

$$(-3, -3)$$

$$207) \begin{aligned} 6 + 18y &= 2x \\ -x + 3y &= -3 \end{aligned}$$

$(3, 0)$

$$208) \begin{aligned} -10y - 5 &= -15x \\ -20y &= 56 + 16x \end{aligned}$$

$(-1, -2)$

$$209) \begin{aligned} 10x - 10 &= -20y \\ -5x &= 16y + 19 \end{aligned}$$

$(9, -4)$

$$210) \begin{aligned} 40y + 10 &= 5x \\ -x + 20y &= -2 \end{aligned}$$

$(2, 0)$

$$211) \begin{aligned} 0 &= -2y + 26 - 17x \\ 0 &= -120 - 60y - 60x \end{aligned}$$

$$(2, -4)$$

$$212) \begin{aligned} -2 &= 20x - 6y \\ -4y &= -58 - 2x \end{aligned}$$

$$(5, 17)$$

$$213) \begin{aligned} 0 &= 1 + x - 9y \\ 6y + x &= 29 \end{aligned}$$

$$(17, 2)$$

$$214) \begin{aligned} -y &= -\frac{1}{4} - \frac{5}{4}x \\ 6y - 34 &= 10x \end{aligned}$$

$$(-13, -16)$$

$$\begin{aligned} 215) \quad & 45 - 24y = -5x \\ & 90 - 18x + 36y = 0 \end{aligned}$$

$(15, 5)$

$$\begin{aligned} 216) \quad & 5y = -3x + 21 \\ & 0 = 15x - 10y \end{aligned}$$

$(2, 3)$

$$\begin{aligned} 217) \quad & 0 = 1 - \frac{24}{25}y + \frac{1}{5}x \\ & 6x + 8y + 30 = 0 \end{aligned}$$

$(-5, 0)$

$$\begin{aligned} 218) \quad & 86 - 54y - 4x = 0 \\ & 23 + 9y = 4x \end{aligned}$$

$(8, 1)$

$$219) -\frac{24}{5} + \frac{2}{5}x = -y$$
$$-4x - 32 = 2y$$
$$(-13, 10)$$

$$220) 36 = 8x + 18y$$
$$2 - y + 24x = 0$$
$$(0, 2)$$

$$221) 7x - 9 = -2y$$
$$-\frac{57}{7} = -3x - \frac{9}{14}y$$
$$(7, -20)$$

$$222) -4x - 44 = -2y$$
$$0 = -x - 7 + \frac{3}{4}y$$
$$(-19, -16)$$

$$223) \begin{aligned} 8 - 12x &= -16y \\ 0 &= 6x - 11 - y \end{aligned}$$

$$(2, 1)$$

$$224) \begin{aligned} -4x + 8 &= -12y \\ -48y &= 4 - 20x \end{aligned}$$

$$(-7, -3)$$

$$225) \begin{aligned} y &= -\frac{4}{7}x + \frac{5}{7} \\ 0 &= -4x - 3y - 23 \end{aligned}$$

$$(-11, 7)$$

$$226) \begin{aligned} -x - \frac{10}{3} &= -\frac{16}{3}y \\ 32y - 14 - 9x &= 0 \end{aligned}$$

$$(2, 1)$$

$$227) -3 + \frac{108}{11}x = \frac{57}{11}y$$

$$23 + 7y - 18x = 0$$

**(4, 7)**

$$228) -3y = 6x$$

$$54 + 36x = -18y$$

**No solution**

$$229) -\frac{8}{9}y = x + \frac{16}{9}$$

$$0 = 16y + 32 + 18x$$

**Infinite number of solutions**

$$230) -y - 11x = -5$$

$$-6y + 30 = 66x$$

**Infinite number of solutions**



$$231) \begin{aligned} -\frac{13}{7} - \frac{1}{7}x &= y \\ -14y - 42 &= 2x \end{aligned}$$

No solution

$$232) \begin{aligned} -18x - 15y &= 21 \\ 6x &= -3y - 33 \end{aligned}$$

$(-12, 13)$

$$233) \begin{aligned} 46 &= 4y + 2x \\ -4y + 2x &= 30 \end{aligned}$$

$(19, 2)$

$$234) \begin{aligned} y &= \frac{31}{10} - \frac{9}{10}x \\ 0 &= x + \frac{30}{17}y - \frac{3}{17} \end{aligned}$$

$(9, -5)$

$$235) -13 = -x - 16y$$

$$\frac{3}{4}x + \frac{5}{4} = -y$$

$$(-3, 1)$$

$$236) -5y = 7x$$

$$42 = 14x + 16y$$

$$(-5, 7)$$

$$237) -9x - 18 = -2y$$

$$-36 - 18x + 13y = 0$$

$$(-2, 0)$$

$$238) 2y - 58 = 24x$$

$$0 = 24x + 108 - 12y$$

$$(-2, 5)$$

$$239) 0 = -x - 9 + \frac{1}{2}y$$

$$-6y - x = 9$$

$$(-9, 0)$$

$$240) 0 = -4y + 3x - 16$$

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

$$(0, -4)$$

$$241) -4 - 8x + 18y = 0$$

$$-12x + 30 = -9y$$

$$(4, 2)$$

$$242) -10x + 18y = 66$$

$$-39 = -18y + x$$

$$(-3, 2)$$

$$\begin{aligned} 243) \quad & -90 = 30y - 15x \\ & -60x - 180 = 60y \end{aligned}$$

$$(0, -3)$$

$$\begin{aligned} 244) \quad & 4x = -17y - 28 \\ & -2x = 20y + 60 \end{aligned}$$

$$(10, -4)$$

$$\begin{aligned} 245) \quad & 0 = -54 - 12y + 19x \\ & -20 = -2x - \frac{8}{5}y \end{aligned}$$

$$(6, 5)$$

$$\begin{aligned} 246) \quad & 26x = 120 + 68y \\ & -33 = -8x + 17y \end{aligned}$$

$$(2, -1)$$

$$247) 3x - \frac{138}{17} = -\frac{42}{17}y$$

$$58 + 7y = 5x$$

$$(6, -4)$$

$$248) -28 - 6y - 14x = 0$$

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

$$(-2, 0)$$

$$249) 12x - 40 = -16y$$

$$-\frac{1}{8} = -2y - \frac{11}{16}x$$

$$(6, -2)$$

$$250) 0 = 1 - \frac{1}{8}x - \frac{1}{4}y$$

$$-54 + 3y = -12x$$

$$(4, 2)$$

$$251) \begin{aligned} 3 &= -3y - 34x \\ 0 &= -18 - 18y + 17x \end{aligned}$$

$$(0, -1)$$

$$252) \begin{aligned} -2x &= -54 - 8y \\ 28 &= -44x + 24y \end{aligned}$$

$$(-5, -8)$$

$$253) \begin{aligned} 14 - \frac{3}{2}x &= -y \\ -3y &= -9x + 51 \end{aligned}$$

$$(2, -11)$$

$$254) \begin{aligned} -6y + 9 + 33x &= 0 \\ 7y &= -50 - 22x \end{aligned}$$

$$(-1, -4)$$

$$255) \begin{aligned} 22 - 2y &= -13x \\ -26x &= -17y + 18 \end{aligned}$$

$$(-2, -2)$$

$$256) \begin{aligned} 0 &= -5x + 8y - 25 \\ -36x + 72y &= 180 \end{aligned}$$

$$(-5, 0)$$

$$257) \begin{aligned} -40 + 12x &= -8y \\ 12y &= 48 - 12x \end{aligned}$$

$$(2, 2)$$

$$258) \begin{aligned} -3y &= -2x + 46 \\ -12 - 12x &= 6y \end{aligned}$$

$$(5, -12)$$

$$259) \begin{aligned} -6x - 13y + 27 &= 0 \\ 12x &= -26y + 54 \end{aligned}$$

Infinite number of solutions

$$260) \begin{aligned} 12y - 4 &= -4x \\ 24y &= -8x + 8 \end{aligned}$$

Infinite number of solutions

$$261) \begin{aligned} 39y &= 21x + 39 \\ -21x + 39y &= 60 \end{aligned}$$

No solution

$$262) \begin{aligned} -24y - 44x + 116 &= 0 \\ 0 &= 11x - 14y + 31 \end{aligned}$$

(1, 3)



$$263) \begin{aligned} -3 - y &= -4x \\ -y + 1 &= -4x \end{aligned}$$

No solution

$$264) \begin{aligned} 8y &= 8 - 24x \\ 0 &= 13y - 46 + 6x \end{aligned}$$

$(-1, 4)$

$$265) \begin{aligned} 0 &= 20y - 20x \\ -64 + 4x - 20y &= 0 \end{aligned}$$

$(-4, -4)$

$$266) \begin{aligned} 66 - 22y &= -44x \\ 13y &= 39 - 11x \end{aligned}$$

$(0, 3)$

$$267) \begin{aligned} 20 &= 6y + 4x \\ 10x + 24y &= -4 \end{aligned}$$

$$(14, -6)$$

$$268) \begin{aligned} 8x &= 38 - 5y \\ 16x &= 6 - 17y \end{aligned}$$

$$(11, -10)$$

$$269) \begin{aligned} -3x - 44 &= -10y \\ y - \frac{2}{15} &= -\frac{7}{30}x \end{aligned}$$

$$(-8, 2)$$

$$270) \begin{aligned} -\frac{16}{9} &= -2x - \frac{2}{9}y \\ -8y &= 25 - 17x \end{aligned}$$

$$(1, -1)$$

$$\begin{aligned} 271) \quad -x - \frac{7}{3} &= \frac{1}{3}y \\ -8x &= 5 - 11y \\ (-2, -1) \end{aligned}$$

$$\begin{aligned} 272) \quad 0 &= -30y + 14x - 6 \\ -50 + 14x - 19y &= 0 \\ (9, 4) \end{aligned}$$

$$\begin{aligned} 273) \quad 0 &= 4x + y - 12 \\ -24y &= 120 - 6x \\ (4, -4) \end{aligned}$$

$$\begin{aligned} 274) \quad 54x &= 54 - 48y \\ -4y &= 4x - 4 \\ (1, 0) \end{aligned}$$

$$275) 0 = 57y - 63x - 81$$

$$12y - 7x + 8 = 0$$

$$(-4, -3)$$

$$276) 10y - 18x = -54$$

$$-20 = 20x - 20y$$

$$(8, 9)$$

$$277) 0 = 1 - x - 34y$$

$$-10 = -10x - 17y$$

$$(1, 0)$$

$$278) -4x + 37 + y = 0$$

$$59 + 7x = 10y$$

$$(13, 15)$$

$$279) -2 + \frac{26}{19}y = \frac{2}{19}x$$

$$-4 - 26y = 5x$$

$$(-6, 1)$$

$$280) 9x = 12y - 120$$

$$13x + 2y = 20$$

$$(0, 10)$$

$$281) -x + \frac{4}{3}y = \frac{16}{3}$$

$$-1 + \frac{4}{7}y = \frac{15}{28}x$$

$$(12, 13)$$

$$282) 20x + 11y = -20$$

$$30y - 10 = 10x$$

$$(-1, 0)$$

$$283) \begin{aligned} -19x &= 44 + 22y \\ 11y &= -22 + 4x \end{aligned}$$

$$(0, -2)$$

$$284) \begin{aligned} -112 + 4y &= -24x \\ x + 7 + 6y &= 0 \end{aligned}$$

$$(5, -2)$$

$$285) \begin{aligned} 32 &= -4y + 27x \\ 16 + 2y + 3x &= 0 \end{aligned}$$

$$(0, -8)$$

$$286) \begin{aligned} -54 + 28x - y &= 0 \\ 0 &= 120 - 32y - 28x \end{aligned}$$

$$(2, 2)$$

$$287) -\frac{1}{3}x = -y - 5$$
$$0 = 34x - 36y + 84$$
$$(-12, -9)$$

$$288) -12y + 10x = 32$$
$$36y + 96 - 30x = 0$$

Infinite number of solutions

$$289) 19x - 8y = 8$$
$$1 = -y + \frac{19}{8}x$$

Infinite number of solutions

$$290) 2x + \frac{10}{3}y = 10$$
$$33x - 165 = -90y$$
$$(5, 0)$$

$$291) \begin{aligned} 36x - 90 &= -54y \\ -36y &= 24x \end{aligned}$$

No solution

$$292) \begin{aligned} -3 &= -\frac{9}{10}y - \frac{6}{5}x \\ -\frac{10}{7}x &= y - \frac{22}{7} \end{aligned}$$

$(-2, 6)$

$$293) \begin{aligned} 0 &= -x - 17y - 47 \\ 36 &= 34y - 8x \end{aligned}$$

$(-13, -2)$

$$294) \begin{aligned} 15 &= -3x - 4y \\ -30x - 24y - 102 &= 0 \end{aligned}$$

$(-1, -3)$



$$295) 0 = 18x - 10y - 16$$

$$0 = 17y - 6x - 22$$

$(2, 2)$

$$296) -36y - 12 - 24x = 0$$

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

Infinite number of solutions

$$297) x + \frac{11}{9}y = -\frac{13}{3}$$

$$150 = 66y + 6x$$

$(-8, 3)$

$$298) 32 = -15x + 14y$$

$$-7x = -28y - 28$$

$(-4, -2)$

$$299) \begin{aligned} -14x + 47 &= 3y \\ 0 &= -18x - 24y \end{aligned}$$

$$(4, -3)$$

$$300) \begin{aligned} -42x &= -120 - 9y \\ -16 &= -28x - 10y \end{aligned}$$

$$(2, -4)$$

$$301) \begin{aligned} -\frac{5}{4}y &= -x + \frac{21}{4} \\ -387 &= -57y - 24x \end{aligned}$$

$$(9, 3)$$

$$302) \begin{aligned} 0 &= 3 - \frac{13}{8}y - \frac{7}{2}x \\ -146 - 42x &= -26y \end{aligned}$$

$$(-1, 4)$$

$$303) \begin{aligned} 26x - 24 &= 43y \\ 13x - 39 &= 26y \end{aligned}$$

$$(-9, -6)$$

$$304) -88y - 184x = -160$$

$$-1 + \frac{1}{29}y = \frac{23}{58}x$$

$$(-2, 6)$$

$$305) \begin{aligned} 96y - 40x + 24 &= 0 \\ -90 &= 2x - 96y \end{aligned}$$

$$(3, 1)$$

$$306) x - \frac{32}{7}y - \frac{150}{7} = 0$$

$$0 = 24y + 18x + 252$$

$$(-6, -6)$$

$$307) \begin{aligned} 0 &= -52 + 34x + 8y \\ -27x &= -6 + 4y \end{aligned}$$

$$(-2, 15)$$

$$308) 9x - 1 = \frac{44}{3}y$$

$$-9x = -111 + 22y$$

$$(5, 3)$$

$$309) \begin{aligned} -12x + 150y &= -138 \\ 6x - 10y &= 264 \end{aligned}$$

$$(49, 3)$$

$$310) \begin{aligned} -66y + 25x &= -29 \\ 33y &= 7x - 79 \end{aligned}$$

$$(-17, -6)$$

$$311) \begin{aligned} -\frac{14}{13}x &= -y + \frac{127}{13} \\ 7x + 94 + 24y &= 0 \end{aligned}$$

$(-10, -1)$

$$312) \begin{aligned} 0 &= 19y - 18x + 122 \\ -68 + 26y &= 54x \end{aligned}$$

$(-8, -14)$

$$313) \begin{aligned} -74 &= 13x + 42y \\ 19y + 39x &= 99 \end{aligned}$$

$(4, -3)$

$$314) \begin{aligned} \frac{5}{6}y &= -1 - \frac{1}{3}x \\ x + \frac{20}{9}y &= -\frac{17}{9} \end{aligned}$$

$(7, -4)$

$$315) -\frac{4}{3} = y + \frac{5}{3}x$$
$$-27y - 96 = 30x$$
$$(4, -8)$$

$$316) 28x - 200 = -64y$$
$$-64y = 33x - 110$$
$$(-18, 11)$$

$$317) -1 - \frac{11}{131}y - \frac{1}{131}x = 0$$
$$-58 = -38y - 46x$$
$$(12, -13)$$

$$318) 0 = -61 - 47y - 80x$$
$$-40x = 86 + 42y$$
$$(1, -3)$$

$$319) \begin{aligned} 0 &= 90 + 111x + 9y \\ 74x + y &= -10 \end{aligned}$$

$(0, -10)$

$$320) \begin{aligned} -14x &= 88y - 52 \\ 132y &= 78 - 21x \end{aligned}$$

Infinite number of solutions

$$321) \begin{aligned} -\frac{11}{7}y &= -x - \frac{17}{7} \\ 33y &= 21x + 72 \end{aligned}$$

No solution

$$322) \begin{aligned} -\frac{1}{10}y - \frac{14}{5} &= -x \\ -4y - 72 &= -40x \end{aligned}$$

No solution

$$323) \begin{aligned} -25x + 12y &= -43 \\ 19 &= -46y + 75x \end{aligned}$$

(7, 11)

$$324) 60y = -3 + 141x$$

$$0 = -1 + \frac{10}{13}y - \frac{47}{26}x$$

No solution

$$325) 0 = 31y - 12x + 8$$

$$\frac{27}{4} + \frac{31}{4}y = 3x$$

No solution

$$326) 108 = 18y + 3x$$

$$-\frac{1}{13} + \frac{15}{13}x = -y$$

(-6, 7)



$$327) \begin{aligned} 58y &= 20x - 70 \\ 0 &= 57 + 29y - 8x \end{aligned}$$

$$(-11, -5)$$

$$328) \begin{aligned} 3y &= \frac{73}{13} - \frac{74}{13}x \\ -60y + 81 &= 111x \end{aligned}$$

$$(11, -19)$$

$$329) \begin{aligned} 0 &= 16y + 32x - 112 \\ 21y &= -64x - 7 \end{aligned}$$

$$(-7, 21)$$

$$330) \begin{aligned} y &= -\frac{116}{7} - \frac{88}{7}x \\ -12 + 44x - 14y &= 0 \end{aligned}$$

$$(-1, -4)$$

$$331) -5y + 91 = -86x$$

$$2x + \frac{14}{43} = -\frac{72}{43}y$$

$$(-1, 1)$$

$$332) 14x = 46 - 3y$$

$$-4y = -24 + 28x$$

$$(-4, 34)$$

$$333) 0 = 14y + 22x - 6$$

$$-132x = 69y - 171$$

$$(6, -9)$$

$$334) 18x + 146 = -5y$$

$$188 = -40y - 4x$$

$$(-7, -4)$$

$$335) \begin{aligned} -432 &= 45y + 21x \\ -2x + 6y &= 0 \end{aligned}$$

$$(-12, -4)$$

$$336) 1 - \frac{19}{34}x = \frac{16}{17}y$$

$$0 = -32y - 21x - 50$$

$$(-42, 26)$$

$$337) \begin{aligned} -16x + 96 + 86y &= 0 \\ -43y - 8x + 48 &= 0 \end{aligned}$$

$$(6, 0)$$

$$338) -4y = 28 - 12x$$

$$x - \frac{5}{12}y = -\frac{4}{3}$$

$$(17, 44)$$

$$339) \begin{aligned} -111y &= -81 + 27x \\ 0 &= 24y - 27x + 81 \end{aligned}$$

$(3, 0)$

$$340) 3x = -\frac{7}{3}y + \frac{7}{3}$$

$$0 = -90x - 43y + 43$$

$(0, 1)$

$$341) \begin{aligned} -50 - 35y &= 25x \\ 27x - 107 &= -70y \end{aligned}$$

$(-9, 5)$

$$342) \begin{aligned} 142 &= -54y + 43x \\ 81y &= -57 + 84x \end{aligned}$$

$(-8, -9)$

$$343) \begin{aligned} 11y + 96x &= -52 \\ -48x - 84 + 9y &= 0 \end{aligned}$$

$$(-1, 4)$$

$$344) \begin{aligned} -46x + 30 + 28y &= 0 \\ 42x &= 7y - 84 \end{aligned}$$

$$(-3, -6)$$

$$345) \begin{aligned} y + \frac{8}{13}x + \frac{29}{13} &= 0 \\ -26y &= 40x + 106 \end{aligned}$$

$$(-2, -1)$$

$$346) \begin{aligned} 52y + 34 &= -14x \\ 59 + 26y &= -9x \end{aligned}$$

$$(-21, 5)$$

$$347) \begin{aligned} -7x &= 8y - 83 \\ 149 &= -5x + 2y \end{aligned}$$

$$(-19, 27)$$

$$348) \begin{aligned} -2x - 40y &= -16 \\ 8 + 20y &= x \end{aligned}$$

$$(8, 0)$$

$$349) \begin{aligned} 94 + 40x &= -7y \\ -18y &= -4 - 20x \end{aligned}$$

$$(-2, -2)$$

$$350) \begin{aligned} y + \frac{18}{5} &= -\frac{1}{5}x \\ 0 &= 120y - 208 - 56x \end{aligned}$$

$$(-8, -2)$$

$$351) \begin{aligned} -36y + 144 &= -36x \\ -x &= 4 - y \end{aligned}$$

Infinite number of solutions

$$352) \begin{aligned} 67 &= 5x + 47y \\ 0 &= -10x + 124 - 94y \end{aligned}$$

No solution

$$353) \begin{aligned} 14x - 40y &= -68 \\ 28x &= 80y - 84 \end{aligned}$$

No solution

$$354) \begin{aligned} -7x + 5 + 5y &= 0 \\ 28x &= 20y - 8 \end{aligned}$$

No solution

$$355) \begin{aligned} -82 - 26y &= -19x \\ 13y + 122 &= 14x \end{aligned}$$

$$(18, 10)$$

$$356) \begin{aligned} 10x + 21y + 31 &= 0 \\ -18 - 8y &= 10x \end{aligned}$$

$$(-1, -1)$$

$$357) \begin{aligned} -81y &= 207 - 72x \\ 0 &= -16y + 48 - 8x \end{aligned}$$

$$(4, 1)$$

$$358) \begin{aligned} -20y &= 88 + 37x \\ -5y &= 40x + 145 \end{aligned}$$

$$(-4, 3)$$



$$359) -99x + 60y = 384$$

$$9 = 21y - 66x$$

$(4, 13)$

$$360) 99 = 63y - 36x$$

$$-\frac{2}{9}x + \frac{7}{27}y = 1$$

$(-8, -3)$

$$361) 0 = 147 + 16x - 3y$$

$$48x = 21y - 69$$

$(-15, -31)$

$$362) -2 + 86x = 14y$$

$$43x + 53 = 16y$$

$(1, 6)$

$$363) \begin{aligned} 0 &= -202 - 64x + 74y \\ 72x + 148y &= 4 \end{aligned}$$

$$(-2, 1)$$

$$364) \begin{aligned} -3 + 23x + 11y &= 0 \\ -1 - \frac{23}{13}x - \frac{41}{39}y &= 0 \end{aligned}$$

$$(3, -6)$$

$$365) \begin{aligned} 0 &= 102 - 100x + 2y \\ -49 &= 31y - 18x \end{aligned}$$

$$(1, -1)$$

$$366) \begin{aligned} -8 - 32x &= 40y \\ -20y + 47x &= 67 \end{aligned}$$

$$(1, -1)$$

$$367) \begin{aligned} 0 &= 104 + 4x + 42y \\ 21y - 108 &= -12x \end{aligned}$$

$$(16, -4)$$

$$368) \begin{aligned} 19x - 18y - 79 &= 0 \\ -54 &= 2x + 2y \end{aligned}$$

$$(-11, -16)$$

$$369) \begin{aligned} 24 + 222y &= -84x \\ 3 + \frac{111}{68}y + \frac{12}{17}x &= 0 \end{aligned}$$

$$(-32, 12)$$

$$370) \begin{aligned} 0 &= -1 - \frac{30}{143}x + \frac{29}{143}y \\ -24y &= -60x - 48 \end{aligned}$$

$$(2, 7)$$

$$371) \begin{aligned} -27y &= 40x - 54 \\ -28 &= 80x - 14y \end{aligned}$$

$$(0, 2)$$

$$372) \begin{aligned} 120 + 60y &= -7x \\ 36y &= -72 - 96x \end{aligned}$$

$$(0, -2)$$

$$373) \begin{aligned} \frac{21}{67}y &= 3 + \frac{87}{134}x \\ \frac{168}{37} &= -3y + \frac{174}{37}x \end{aligned}$$

$$(-22, -36)$$

$$374) \begin{aligned} -y - \frac{27}{43} + \frac{8}{43}x &= 0 \\ -\frac{49}{86}x &= -y + \frac{6}{43} \end{aligned}$$

$$(-2, -1)$$

$$375) \begin{aligned} 11 - y &= 13x \\ 69 &= 12x - 3y \end{aligned}$$

$$(2, -15)$$

$$376) \begin{aligned} -34y &= -9x + 95 \\ -3 + \frac{105}{139}x &= \frac{51}{139}y \end{aligned}$$

$$(3, -2)$$

$$377) \begin{aligned} -20x + 136 &= 24y \\ -8y &= -8x + 72 \end{aligned}$$

$$(8, -1)$$

$$378) \begin{aligned} 0 &= y + \frac{43}{15}x - \frac{71}{15} \\ -33x + 30y &= -96 \end{aligned}$$

$$(2, -1)$$

$$379) \frac{18}{11}y + \frac{1}{11}x = -1$$
$$-6x = 66 + 6y$$
$$(-11, 0)$$

$$380) 24y + 60 - 18x = 0$$
$$y = -76 - 36x$$
$$(-2, -4)$$

$$381) 70x + 130 + 60y = 0$$
$$-130 = 70x + 60y$$

Infinite number of solutions

$$382) \frac{77}{25} = -x - \frac{11}{25}y$$
$$\frac{25}{13}x + \frac{9}{13}y = -1$$
$$(11, -32)$$

$$383) 148 = 42x + 52y$$

$$x + \frac{26}{21}y = \frac{53}{21}$$

No solution

$$384) 52x + 56y = 136$$

$$-42 + 28y = -26x$$

No solution

$$385) 114x + 210 = 30y$$

$$105 = 15y + 19x$$

(0, 7)

$$386) 93y = 21 - 15x$$

$$2y + \frac{10}{31}x + \frac{58}{31} = 0$$

No solution

$$387) \begin{aligned} -15x &= -426 + 36y \\ -60 &= -3x - 6y \end{aligned}$$

$$(-22, 21)$$

$$388) \begin{aligned} 10y &= 44 + 4x \\ 120x + 81y &= 204 \end{aligned}$$

$$(-1, 4)$$

$$389) 9y - 43x + 129 = 0$$

$$y = \frac{19}{6} - \frac{19}{18}x$$

$$(3, 0)$$

$$390) \begin{aligned} -109 &= -11y + 38x \\ 46 - 44y - 43x &= 0 \end{aligned}$$

$$(-2, 3)$$



$$391) \begin{aligned} -90 - 7y &= -10x \\ 28y - 50x &= -100 \end{aligned}$$

$$(-26, -50)$$

$$392) \begin{aligned} -26y - 133 &= -27x \\ 0 &= 52y + 15x + 59 \end{aligned}$$

$$(3, -2)$$

$$393) \begin{aligned} -16x &= -42y - 72 \\ 0 &= -1 - \frac{13}{36}x + \frac{7}{6}y \end{aligned}$$

$$(36, 12)$$

$$394) \begin{aligned} -28x &= -41y - 64 \\ 138x + 36 &= 246y \end{aligned}$$

$$(14, 8)$$

$$395) 0 = -y - \frac{4}{37}x - \frac{23}{37}$$
$$-x - 51 + 36y = 0$$
$$(-15, 1)$$

$$396) -29x - 28y = 104$$
$$108x = -42y + 360$$
$$(8, -12)$$

$$397) 82x = -y$$
$$41x - 2y = 0$$
$$(0, 0)$$

$$398) y + \frac{24}{7}x = \frac{10}{7}$$
$$-28 = -10y - 36x$$
$$(8, -26)$$

$$399) 0 = -x + \frac{22}{5} - \frac{9}{10}y$$

$$-9y = -55 - x$$

$$(-1, 6)$$

$$400) 0 = 18 - 24x + 6y$$

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

$$(1, 1)$$

$$401) 0 = -200y + 47x + 177$$

$$0 = -64x + 100y + 276$$

$$(9, 3)$$

$$402) -74y + 97 = -49x$$

$$-286 = -2x + 148y$$

$$(-5, -2)$$

$$403) \begin{aligned} -9x - 74 - 46y &= 0 \\ 138y &= -178 - 26x \end{aligned}$$

$$(-44, 7)$$

$$404) \begin{aligned} 64x - 64 &= -87y \\ 134y - 256x &= -256 \end{aligned}$$

$$(1, 0)$$

$$405) \begin{aligned} 55x + 87 + 78y &= 0 \\ -29y + 14 &= 5x \end{aligned}$$

$$(-3, 1)$$

$$406) \begin{aligned} 102x + 51 &= -51y \\ 250 &= 34y - 3x \end{aligned}$$

$$(-4, 7)$$

$$407) \begin{aligned} 64 - 168x &= 80y \\ -20y - 212 &= 36x \end{aligned}$$

$$(38, -79)$$

$$408) \begin{aligned} 214 &= -86y + 116x \\ 45y &= 29x + 205 \end{aligned}$$

$$(10, 11)$$

$$409) \begin{aligned} \frac{46}{29}y &= -x - \frac{152}{29} \\ -154 - 92y - 43x &= 0 \end{aligned}$$

$$(-10, 3)$$

$$410) \begin{aligned} -232 &= 100y + 66x \\ 60 &= -200y + 70x \end{aligned}$$

$$(-2, -1)$$

$$411) \begin{aligned} -105 &= 210x + 105y \\ -45 &= 30x + 15y \end{aligned}$$

No solution

$$412) \begin{aligned} 40y &= 136x + 264 \\ -\frac{9}{34}y &= -x - \frac{79}{17} \end{aligned}$$

$(-29, -92)$

$$413) \begin{aligned} -525 - 1275y + 180x &= 0 \\ y + \frac{23}{85} - \frac{12}{85}x &= 0 \end{aligned}$$

No solution

$$414) \begin{aligned} x - \frac{17}{19} &= -\frac{45}{19}y \\ y + \frac{19}{45}x &= -\frac{2}{45} \end{aligned}$$

No solution

$$415) 49x = 28y - 21$$

$$-\frac{7}{3}x = 1 - \frac{4}{3}y$$

Infinite number of solutions

$$416) 66 - 6y = -89x$$

$$-36y = -396 - 534x$$

Infinite number of solutions

$$417) 66x = 166 - 124y$$

$$-113 = -62y - 27x$$

$(-5, 4)$

$$418) -156y - 176x = 244$$

$$-223 - 13y - 4x = 0$$

$(19, -23)$

$$419) -\frac{41}{33}x - \frac{13}{33}y = 1$$

$$82x = -24y + 40$$

$$(16, -53)$$

$$420) -8y = 108 + 98x$$

$$196x + 29 = -33y$$

$$(-2, 11)$$

$$421) 0 = 25y - 243 - 66x$$

$$0 = 3x - 186 + 12y$$

$$(2, 15)$$

$$422) -142y - 228 = 124x$$

$$-83x = -223 + 142y$$

$$(-11, 8)$$



$$423) \begin{aligned} 156 + 33y &= -57x \\ -85x &= 66y - 36 \end{aligned}$$

$$(-12, 16)$$

$$424) 120y = -95x + 120$$

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

$$(0, 1)$$

$$425) \begin{aligned} 44y &= 8x + 136 \\ -24 + 264y + 84x &= 0 \end{aligned}$$

$$(-6, 2)$$

$$426) \begin{aligned} 86x + 14y - 292 &= 0 \\ 0 &= -34 + 3x - y \end{aligned}$$

$$(6, -16)$$

$$427) \begin{aligned} -64y &= -35x + 184 \\ 40 - 32y + 23x &= 0 \end{aligned}$$

$$(-24, -16)$$

$$428) \frac{11}{42}x = -1 - \frac{4}{21}y$$

$$x = -\frac{52}{33} - \frac{23}{33}y$$

$$(50, -74)$$

$$429) \begin{aligned} -47x &= -149 - 16y \\ -278 - 46x &= 2y \end{aligned}$$

$$(-5, -24)$$

$$430) -x = -\frac{1}{7}y + \frac{2}{7}$$

$$-150 = -140x + 58y$$

$$(-1, -5)$$

$$431) \begin{aligned} -38y - 218 &= 168x \\ 151 - 23y &= 84x \end{aligned}$$

$$(-16, 65)$$

$$432) \begin{aligned} 0 &= 58x - 51y - 292 \\ 138 + 39y &= 87x \end{aligned}$$

$$(-2, -8)$$

$$433) \begin{aligned} 71x &= -30y - 51 \\ -1 - \frac{1}{3}y - \frac{7}{9}x &= 0 \end{aligned}$$

$$(39, -94)$$

$$434) \begin{aligned} 0 &= 73y - 43x + 137 \\ 126 + 91x &= 146y \end{aligned}$$

$$(-80, -49)$$

$$\begin{aligned} 435) \quad & -251 - 44x = 59y \\ & 384 + 24y - 264x = 0 \end{aligned}$$

$$(1, -5)$$

$$\begin{aligned} 436) \quad & -60y = -55x + 45 \\ & -195 = -120y + 91x \end{aligned}$$

$$(15, 13)$$

$$\begin{aligned} 437) \quad & -84x = 84 + 61y \\ & y + 42x + 42 = 0 \end{aligned}$$

$$(-1, 0)$$

$$\begin{aligned} 438) \quad & x - \frac{162}{79} = -\frac{12}{79}y \\ & -693 - 9y = 195x \end{aligned}$$

$$(-6, 53)$$

$$439) \begin{aligned} 0 &= 33x + 67y \\ 11x + 27y &= -154 \end{aligned}$$

$$(67, -33)$$

$$440) \begin{aligned} -90x + 17y &= 41 \\ 226 &= 180x - 38y \end{aligned}$$

$$(-15, -77)$$

$$441) \begin{aligned} 162y - 67x - 296 &= 0 \\ 27 &= 243y + 108x \end{aligned}$$

$$(-2, 1)$$

$$442) \begin{aligned} 106y - 216 &= 92x \\ 46x &= -154 + 53y \end{aligned}$$

No solution

$$443) \begin{aligned} 0 &= 232 + 98x - 184y \\ 116 - 92y &= -49x \end{aligned}$$

Infinite number of solutions

$$444) \begin{aligned} -204 &= 462x - 300y \\ -34 &= 77x - 50y \end{aligned}$$

Infinite number of solutions

$$445) \begin{aligned} -70x - 10 + 45y &= 0 \\ -9y + 21x &= -93 \end{aligned}$$

$(-13, -20)$

$$446) \begin{aligned} -17x + 7 &= 22y \\ 28y + 158 &= 34x \end{aligned}$$

$(3, -2)$

$$447) \begin{aligned} -29y - 84x + 159 &= 0 \\ -48 - 17y &= 21x \end{aligned}$$

$$(5, -9)$$

$$448) \begin{aligned} 0 &= -83x + 31y + 186 \\ -114 - 166x &= 19y \end{aligned}$$

$$(0, -6)$$

$$449) \begin{aligned} 0 &= -64x - 112y + 16 \\ -y - \frac{83}{56} &= -\frac{27}{112}x \end{aligned}$$

$$(2, -1)$$

$$450) \begin{aligned} 168x &= -840 + 315y \\ x &= -5 - \frac{35}{54}y \end{aligned}$$

$$(-5, 0)$$

$$451) \begin{aligned} 166 - 26y - 2x &= 0 \\ 60y - 12x &= 300 \end{aligned}$$

$(5, 6)$

$$452) \begin{aligned} \frac{71}{91}x &= y - \frac{57}{91} \\ -\frac{71}{57}x &= 1 - \frac{91}{57}y \end{aligned}$$

Infinite number of solutions

$$453) \begin{aligned} 13y + 108x + 108 &= 0 \\ -27x - 27 &= -56y \end{aligned}$$

$(-1, 0)$

$$454) \begin{aligned} -95y - 95 &= -4x \\ -190y &= -65x + 190 \end{aligned}$$

$(0, -1)$



$$455) \quad 2x - 50 = 16y$$
$$-y + \frac{5}{56}x = -\frac{19}{56}$$

(97, 9)

$$456) \quad -10x - 33y = 102$$
$$0 = -x + \frac{213}{49} - \frac{132}{49}y$$

(69, -24)

$$457) \quad -186 = -24x + 31y$$
$$10y = -572 + 16x$$

(62, 42)

$$458) \quad -120 + 9y = 129x$$
$$y = \frac{43}{77}x - \frac{34}{77}$$

(-1, -1)

$$\begin{aligned} 459) \quad & -264x + 174y = -438 \\ & -142 + 176x = -34y \end{aligned}$$

$$(1, -1)$$

$$460) \quad -3y = \frac{17}{3}x + \frac{35}{3}$$

$$160 - 92x = 72y$$

$$(-10, 15)$$

$$\begin{aligned} 461) \quad & -58y - 272 = 2x \\ & -12x + 272 = 76y \end{aligned}$$

$$(67, -7)$$

$$462) \quad 1 = \frac{31}{105}x - \frac{4}{35}y$$

$$188y - 124x = -560$$

$$(3, -1)$$

$$463) 204x - 2y = -176$$

$$-\frac{34}{25}x = -2 - \frac{6}{25}y$$

$$(-1, -14)$$

$$464) -y - 67 = -x$$

$$34y = -378 - 4x$$

$$(50, -17)$$

$$465) -12 - 15x - 9y = 0$$

$$-166x - 90y = -424$$

$$(34, -58)$$

$$466) -186 - 102x = 37y$$

$$30y = 588 + 102x$$

$$(-4, 6)$$

$$467) \begin{aligned} 63x &= 252 + 14y \\ 270 &= 126x - 54y \end{aligned}$$

$(6, 9)$

$$468) \begin{aligned} -46x &= -114 - 50y \\ 0 &= 23x - 48y + 81 \end{aligned}$$

$(9, 6)$

$$469) \begin{aligned} 0 &= 9y + 87 - 60x \\ 0 &= -15x + 2y + 11 \end{aligned}$$

$(-5, -43)$

$$470) \begin{aligned} -69y - 53x - 218 &= 0 \\ -61 &= -106x - 67y \end{aligned}$$

$(5, -7)$

$$471) 144x - 282y + 138 = 0$$

$$-x + \frac{47}{83}y + \frac{36}{83} = 0$$

$(1, 1)$

$$472) -20y + x = 176$$

$$33x = -264 - 99y$$

$(16, -8)$

$$473) 80 - 76x = 48y$$

$$144y - 240 + 228x = 0$$

Infinite number of solutions

$$474) x = -\frac{98}{37}y - \frac{196}{37}$$

$$53y = 111x - 106$$

$(0, -2)$

$$475) \begin{aligned} 0 &= -73y - 75x + 6 \\ 12 - 146y &= 150x \end{aligned}$$

Infinite number of solutions

$$476) \begin{aligned} -93 + 53y &= 6x \\ 558 + 36x &= 318y \end{aligned}$$

Infinite number of solutions

$$477) \begin{aligned} \frac{10}{7} &= -2y + \frac{29}{14}x \\ -168y + 174x &= 114 \end{aligned}$$

No solution

$$478) \begin{aligned} 190y &= 380 + 240x \\ -60x + 23y &= 46 \end{aligned}$$

(0, 2)

$$479) \begin{aligned} 18y + 76x &= -62 \\ 91 &= 3y - 38x \end{aligned}$$

$$(-2, 5)$$

$$480) \begin{aligned} y - \frac{26}{31}x &= \frac{123}{31} \\ 31y + 99 - 63x &= 0 \end{aligned}$$

$$(6, 9)$$

$$481) \begin{aligned} -222 - 25y &= -86x \\ -2 &= -\frac{43}{25}x - \frac{18}{25}y \end{aligned}$$

$$(2, -2)$$

$$482) \begin{aligned} 0 &= -34x - 4y + 360 \\ -\frac{52}{59}y + \frac{84}{59} &= x \end{aligned}$$

$$(12, -12)$$

$$483) 6y - 68 = 166x$$

$$\frac{8}{83}y = x + \frac{229}{83}$$

$$(1, 39)$$

$$484) 0 = 45y - 26x - 64$$

$$28 + 12y = 52x$$

$$(1, 2)$$

$$485) -61x - 11y - 67 = 0$$

$$92 = 244x + 116y$$

$$(-2, 5)$$

$$486) -84 = -66y + 318x$$

$$-53x = 49 - 12y$$

$$(7, 35)$$



$$487) -90 + x - 28y = 0$$

$$y - \frac{60}{29} = \frac{8}{29}x$$

$$(-22, -4)$$

$$488) -17y + 66 = -83x$$

$$2y - \frac{33}{25} = \frac{83}{25}x$$

$$(-1, -1)$$

$$489) -81x - 32y = -257$$

$$-52y - 162x = 38$$

$$(-15, 46)$$

$$490) 150 + 44x - 10y = 0$$

$$-y + 1 + \frac{8}{5}x = 0$$

$$(-5, -7)$$

$$491) \begin{aligned} 5y + 99x &= -49 \\ -58y + 184 &= 396x \end{aligned}$$

$$(-1, 10)$$

$$492) \begin{aligned} 135x + 192y &= -270 \\ 162 + 128y &= -81x \end{aligned}$$

$$(-2, 0)$$

$$493) \begin{aligned} 0 &= 90y + 225 - 105x \\ 15x + 109 &= 2y \end{aligned}$$

$$(-9, -13)$$

$$494) \begin{aligned} 12y - 232 &= -80x \\ -30y &= -220 + 20x \end{aligned}$$

$$(2, 6)$$

$$495) \begin{aligned} -11x &= -22y + 143 \\ 0 &= 50 + 110y - 10x \end{aligned}$$

$$(-17, -2)$$

$$496) 10y = 5x - 5$$

$$x = \frac{14}{19}y - \frac{5}{19}$$

$$(-1, -1)$$

$$497) -16y + 432 = 40x$$

$$x + \frac{12}{25}y = \frac{74}{25}$$

$$(50, -98)$$

$$498) 0 = 39x + 174 - 87y$$

$$-1 - \frac{117}{128}x + \frac{1}{2}y = 0$$

$$(0, 2)$$

$$499) -48 + 37x + 25y = 0$$

$$-\frac{37}{112}x - \frac{9}{112}y = -1$$

$(4, -4)$

$$500) -2 - \frac{50}{73}y = -\frac{24}{73}x$$

$$-1 + \frac{12}{23}x + \frac{25}{23}y = 0$$

$(4, -1)$