

$$1) x+y=4$$

$$x=4, y=4$$

$$2x-y=5$$

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

$$y=2x-5$$

$$(3,1)$$

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

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

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

$$4x-y=1$$

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

$$y=4x-1$$

$$(1,3)$$

$$3) 2x+y=7$$

$$y=-2x+7$$

$$x+y=3$$

$$x=3, y=3$$

$$(4,-1)$$

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

$$4x=-12$$

$$x=-3$$

$$y=2(-3)$$

$$(-3,-6)$$

$$y=-6$$

$$5) 3x+x+3=11$$

$$4x=8$$

$$x=2$$

$$y=2+3$$

$$y=5$$

$$(2,5)$$

$$6) x+3(2x+1)=31$$

$$x+6x+3=31$$

$$7x=28$$

$$x=4$$

$$y=2(4)+1$$

$$y=8+1$$

$$(4,9)$$

$$y=9$$

$$7) x=3-y$$

$$x=3-(-1)$$

$$4(3-y)-2y=18$$

$$x=3+1$$

$$12-4y-2y=18$$

$$x=4$$

$$-6y=6$$

$$y=-1$$

$$(4,-1)$$

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

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

$$-x=-2$$

$$x=2$$

$$4(2)+2y=2$$

$$8+2y=2$$

$$2y=-6$$

$$y=-3$$

$$(2,-3)$$

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

$$-5x+y=-9$$

$$-3y=12$$

$$y=-4$$

$$5x-2(-4)=3$$

$$5x+8=3$$

$$5x=-5$$

$$x=-1$$

$$(-1,-4)$$

$$10) 9x+6y=24$$

$$+ 2x-6y=42$$

$$11x=66$$

$$x=6$$

$$3(6)+2y=8$$

$$18+2y=8$$

$$2y=-10$$

$$y=-5$$

$$(6,-5)$$

$$11) 4x+8y=-4$$

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

$$5y=5$$

$$y=1$$

$$x+2(1)=-1$$

$$x+2=-1$$

$$x=-3$$

$$(-3,1)$$

$$\begin{array}{r}
 12) \quad 3x + 4y = 22 \\
 - \quad 3x - 15y = -111 \\
 \hline
 19y = 133 \\
 y = 7 \\
 x - 5(7) = -37 \\
 x - 35 = -37 \\
 x = -2 \\
 \hline
 (-2, 7)
 \end{array}$$

$$\begin{array}{r}
 13) \quad 10x + 5y = -5 \\
 + \quad 7x - 5y = 5 \\
 \hline
 17x = 0 \\
 x = 0 \\
 y = -1 \\
 \hline
 (0, -1)
 \end{array}$$

$$\begin{array}{r}
 14) \quad 3(5y) - 4y = 11 \\
 15y - 4y = 11 \\
 11y = 11 \\
 y = 1 \\
 x = 5 \\
 \hline
 (5, 1)
 \end{array}$$

$$\begin{array}{r}
 15) \quad 0.3x - 0.5y = 2 \\
 -0.3x + y = -4 \\
 \hline
 -1.5y = 6 \\
 y = -4 \\
 0.3x + -4 = -4 \\
 0.3x = 0 \\
 x = 0 \\
 \hline
 (0, -4)
 \end{array}$$

$$\begin{array}{r}
 16) \quad x = 22 - 3y \\
 \frac{1}{2}(22 - 3y) + \frac{1}{3}y = 4 \\
 11 - \frac{3}{2}y + \frac{1}{3}y = 4 \\
 11 - \frac{9}{6}y + \frac{2}{6}y = 4 \\
 \frac{-4}{3}\left(-\frac{7}{6}y = -7\right) \\
 y = 6 \\
 x = 22 - 3(6) \\
 x = 22 - 18 \\
 x = 4 \\
 \hline
 (4, 6)
 \end{array}$$

$$\begin{array}{r}
 17) \quad y = 4 - 2x \\
 \frac{2}{3}x + \frac{1}{4}(4 - 2x) = 2 \\
 \frac{2}{3}x + 1 - \frac{1}{2}x = 2 \\
 \frac{4}{6}x + 1 - \frac{3}{6}x = 2 \\
 6\left(\frac{1}{6}x = 1\right) \\
 x = 6 \\
 y = 4 - 2(6) \\
 y = 4 - 12 \\
 y = -8 \\
 \hline
 (6, -8)
 \end{array}$$