

1) $\{(4,24)\}$

2) $\{(10,20)\}$

3) $\{(18,6)\}$

4) $\{(8,2)\}$

5) $\{(7,5)\}$

6) $\{(11,5)\}$

7) $\{(2,7)\}$

8) $\{(-4,-3)\}$

9) $\{(3,4)\}$

10) $\{(3,-2)\}$

11) $\{(5,-7)\}$

12) $\{(4,-\frac{1}{2})\}$

13) $\{(-1,\frac{2}{3})\}$

14) $\{(100,125)\}$

15) $\{(3,5)\}$

$\{(2,-1)\}$

$\{(8,-2)\}$

6) $c = 3d - 4$ $c + d = 16$

$c = 3(5) - 4$

$c = 11$

$[3d - 4] + d = 16$

$4d - 4 = 16$

$4d - 4 + 4 = 16 + 4$

$\frac{4d}{4} = \frac{20}{4}$

$d = 5$

$\{(11, 5)\}$

$$8) \quad 3a = 2b - 6 \quad a = b - 1$$

$$3(b-1) = 2b - 6$$

$$3b - 3 = 2b - 6$$

$$3b - 2b - 3 = 2b - 2b - 6$$

$$b - 3 = -6$$

$$b - 3 + 3 = -6 + 3$$

$$b = -3$$

$$a = (-3) - 1$$

$$a = -4$$

$$\{(-4, -3)\}$$

$$10) \quad 3n + 5m = 7 \quad m - 4n = 6$$

$$3n + 5[4n + 6] = 7$$

$$3n + 20n + 30 = 7$$

$$23n + 30 = 7$$

$$23n + 30 - 30 = 7 - 30$$

$$\frac{23n}{23} = \frac{-23}{23}$$

$$n = -1$$

$$m - 4n = 6$$

$$m - 4n + 4n = 6 + 4n$$

$$m = 4n + 6$$

$$m = 4(-1) + 6$$

$$m = 2$$

$$\{(2, -1)\}$$

$$12) \quad 3y - x = -9$$

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

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

$$x = 3y + 9$$

$$x = 3(-2) + 9$$

$$x = -6 + 9$$

$$x = 3$$

$$\{(3, -2)\}$$

$$2y + 5x = 11$$

$$2y + 5[3y + 9] = 11$$

$$2y + 15y + 45 = 11$$

$$17y + 45 = 11$$

$$17y + 45 - 45 = 11 - 45$$

$$\frac{17y}{17} = \frac{-34}{17}$$

$$y = -2$$

$$14) \quad 3x + 2y = 11$$

$$3[-4y + 2] + 2y = 11$$

$$-12y + 6 + 2y = 11$$

$$-10y + 6 = 11$$

$$-10y + 6 - 6 = 11 - 6$$

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

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

$$x - 2 = -4y$$

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

$$x = -4y + 2$$

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

$$x = 2 + 2 = 4$$

$$\{(4, -\frac{1}{2})\}$$