

6.6 - Isolating for y

Solve the following equations for y

1) $2x + y = 7$

$$\begin{array}{rcl} -2x & & -2x \\ 2x + y = 7 & & \end{array}$$

$$\boxed{y = -2x + 7}$$

2) $-8x + y = 10$

$$\begin{array}{rcl} +8x & & +8x \\ -8x + y = 10 & & \end{array}$$

$$\boxed{y = 8x + 10}$$

3) $4x + 2y = 8$

$$\begin{array}{rcl} -4x & & -4x \\ 4x + 2y = 8 & & \end{array}$$

$$\frac{2y}{2} = \frac{-4x + 8}{2}$$

$$\boxed{y = -2x + 4}$$

4) $-6x - 2y = 16$

$$\begin{array}{rcl} +6x & & +6x \\ -6x - 2y = 16 & & \end{array}$$

$$\frac{-2y}{-2} = \frac{6x + 16}{-2}$$

$$\boxed{y = -3x - 8}$$

5) $12 = 9x + 3y$

$$\begin{array}{rcl} -9x & & -9x \\ 12 = 9x + 3y & & \end{array}$$

$$\frac{-9x + 12}{3} = \frac{3y}{3}$$

$$\boxed{-3x + 4 = y}$$

6) $48 = 24x + 6y$

$$\begin{array}{rcl} -24x & & -24x \\ 48 = 24x + 6y & & \end{array}$$

$$\frac{-24x + 48}{6} = \frac{6y}{6}$$

$$\boxed{-4x + 8 = y}$$

$$7) -10x + 5y = 30$$

$$+10x \qquad +10x$$

$$\frac{5y}{5} = \frac{10x + 30}{5}$$

$$\boxed{y = 2x + 6}$$

$$8) 14x - 7y = 84$$

$$-14x \qquad -14x$$

$$\frac{-7y}{-7} = \frac{-14x + 84}{-7}$$

$$\boxed{y = 2x - 12}$$