

# Unit 5 Review: Equations

Directions: Solve each equation.

1)  $6x = -24$

$$\frac{6x}{6} = \frac{-24}{6}$$

$$x = -4$$

4)  $\frac{y}{4} = 5$  (4)

$$y = 20$$

3)  $5 - g = 7$

$$\begin{array}{r|l} -5 & -5 \\ \hline -g & = 2 \\ -1 & -1 \\ \hline g & = -2 \end{array}$$

4)  $3m - 6 = 12$

$$\begin{array}{r|l} +6 & +6 \\ \hline 3m & = 18 \\ \frac{3}{3} & \frac{18}{3} \\ \hline m & = 6 \end{array}$$

7)  $10 - 6x = -2$

$$\begin{array}{r|l} -10 & -10 \\ \hline -6x & = -12 \\ -6 & -6 \\ \hline x & = 2 \end{array}$$

8)  $-3 = \frac{2}{3}p + 5$

$$\begin{array}{r|l} -5 & -5 \\ \hline 3(-8) & = \frac{2}{3}p(3) \\ \hline -24 & = \frac{2p}{2} \\ \hline -12 & = p \end{array}$$

Directions: Write a verbal translation, model the situation and find the solution for the equation.

9)  $y + 9 = 5$

a. Verbal:

A number plus 9 equals 5.

b. Solution:

$$y = -4$$

Directions: For the situation make an equation, define your variable and solve your equation.

10) Robin works for the news channel CSN. She loves breaking new stories. So far this year she's broken 12 new stories. Every month she breaks 3 new stories. How long until she breaks 24 stories?

$$\begin{array}{r|l} 12 + 3m & = 24 \\ -12 & -12 \\ \hline 3m & = 12 \\ \frac{3}{3} & \frac{12}{3} \\ \hline m & = 4 \end{array}$$

$m = \#$  of months