

Variables, Expressions, and Equations

Evaluate the expressions given $x = 4$.

$$\begin{array}{l} x + 5 \\ + 5 \end{array}$$

$$\begin{array}{l} 2x - 9 \\ 2() - 9 \\ - 9 \end{array}$$

$$\begin{array}{l} 3x^2 - 17 \\ 3()^2 - 17 \\ 3 \cdot \quad - 17 \\ - 17 \end{array}$$

$$\begin{array}{l} 3 \cdot 16 \\ 16 \cdot 3 \\ 16 + 16 + 16 \\ 30 + 18 \\ 48 \end{array}$$

Evaluate the expressions given $x = 3$ and $y = -1$.

$$\begin{array}{c} x + y \\ \swarrow \quad \searrow \\ + (\quad) \\ - \end{array}$$

$$\begin{array}{c} 2x - y \\ \swarrow \quad \searrow \\ \underline{2(\quad) - (\quad)} \\ - (\quad) \\ + \end{array}$$

$$\begin{array}{c} \frac{3x - y^2}{2xy} \\ 3(\quad) - (\quad)^2 \\ \hline 2(\quad)(\quad) \\ 3(\quad) - \end{array}$$

$$\frac{\quad}{\quad}$$

Is $x = 5$ a solution to the following equations?

$$x + 2 = 6$$



$$+ 2 = 6$$

$$= 6$$

$$2x + 2 = x^2 - 13$$



$$\underline{2}(\underline{\quad}) + 2 = \underline{(\quad)}^2 - 13$$

$$+ 2 = \quad - 13$$

$$=$$