

Evaluating Algebra Expressions with Integers

- Example: Evaluate the following expressions if $x = 7$ and $y = -3$.

$$\begin{aligned} 1. \quad & 3x + y^2 \\ & 3(7) + (-3)^2 \\ & 21 + 9 \\ & 30 \end{aligned}$$

$$\begin{aligned} 2. \quad & 2xy + 5y \\ & 2(7)(-3) + 5(-3) \\ & -42 + -15 \\ & -57 \end{aligned}$$

Use the examples above to evaluate the problems below.

$4x + y$; use $2 = x$ and $3 = y$.

$5(c - d)$; use $2 = c$ and $-3 = d$.

$w(7 - x)$; use $w = 2$ and $x = 10$

$a - b + 2$; use $9 = a$ and $4 = b$.

$n^2 - m$; use $7 = m$ and $4 = n$

$5mn$; use $4 = m$ and $n = -3$