Evaluating Expressions

To evaluate an expression, substitute the given values for variables. Then use the correct order of operations to simplify.

Example

Evaluate the following expression for $x = 4$ and $y = 7$.

$3x - 5y$

Substitute 4 for x and 7 for y in the expression.

$$3x - 5y = 3 \cdot 4 - 5 \cdot 7$$
$$= 12 - 35$$
$$= \mathbf{-23}$$

Practice

Directions: For Numbers 1 through 8, evaluate each expression for the given variables.

1. $12x + 4y$ for $x = 8$ and $y = -3$

2. $a^2 - 6b$ for $a = -3$ and $b = 2$

3. $10m \div 2n$ for $m = 4$ and $n = -4$

4. $s^2 - 3s + t$ for $s = 5$ and $t = 15$

5. $g \div 3h$ for $g = -12$ and $h = -1$

6. $3a - 7b$ for $a = -1$ and $b = 4$

7. $-3p + q$ for $p = -3$ and $q = 9$

8. $2h + 5j - 7$ for $h = 2$ and $j = 6$