Evaluating Expressions

Evaluating Algebraic Expressions

To evaluate an algebraic expression, substitute the variable with a number and perform the operation(s) in the expression.

Example: Evaluate $x + 7$, for $x = 12$

$x + 7$ substitute the x with the given value, 12
$12 + 7$ perform the operation (add)
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Which expression has the greatest value?

x = 9 y = -3

x - y	xy	$\frac{x}{y}$
y - x	x + y	$\frac{y}{x}$

Evaluate the expression if $m = -4$ and $z = 9$.

z - m

Evaluate the expression if $m = 0$ and $z = -7$.

4m - z

Evaluate the expression if $m = -2$ and $z = -5$.

2z + m

Evaluate the expression if $x = 21$, $y = 3$, and $z = -1$

$$2y + (z - x \div 3)$$

$2 \cdot y + (z - x \div y)$

$= 2 \cdot 3 + (-1 - 21 \div 3)$ Replace x with 21, y with 3, and z with -1.

$=$

$=$

$=$

$=$

Evaluate the expression if g = 4, j = -8, and k = 12

$$gk \div j + 3$$

Evaluating with Exponents

$$x = 3$$

x^2 $(x)^2$ $(-x)^2$ $-(x)^2$

Spin the wheel to find a value for a, b, and c.

$$a = \quad b = \quad c =$$

$$a(6 \div 2) + -(b)^2$$

Spin the wheel to find a value for a, b, and c.

$$a = \quad b = \quad c =$$

$$-c + (b + 2)(-a + 3)$$