

Evaluating Expressions

EXAMPLE

Replace the letters with the number values and follow the order of operations.

Example: If $a = 2$ and $b = -3$, find the value of $(a + b)^2$
 $(a + b)^2 = (2 + (-3))^2 = (-1)^2 = 1$

1. Find the value of $4x^2y$ if $x = -3$ and $y = 2$.

6. What is the value of $6xy^2$ when $x = 2$ and $y = -3$?

- (1) -108 (3) +72
 (2) +108 (4) -72

2. If $x = 2$ and $y = -1$, which expression has a value of 5?

- (1) $x^2 + y$ (3) $x + 3y$
 (2) $x^2 - y$ (4) $x^2 + 2y$

7. Find C in $C = \frac{5}{9}(F - 32)$ if $F = 14$.

- (1) 10 (3) 25
 (2) -10 (4) 100

3. Find the value of the expression $5x^3$ when $x = -2$.

- (1) -30 (3) -40
 (2) +30 (4) +40

8. If $x = 6$ and $y = 5$, find the value of $\frac{x}{8} + \frac{2}{y}$.

4. Given the formula $A = \frac{1}{2}bh$, find the value of A if $b = 5$ and $h = 8$.

9. If $x = -4$ and $y = 2$, which expression has a value of 12?

- (1) $x^2 + y^2$ (3) $2x + 2y$
 (2) $x^2 - y^2$ (4) $2x - 2y$

5. If $x = 8$ and $y = 3$, find the value of $\frac{4}{x} - \frac{1}{y}$.

10. Find the value of $-2x^3$ if $x = -3$.
