

Alg 1 1.2

Evaluate numerical expressions using the order of operations.

Evaluate algebraic expressions using order of operations

PEMDAS

GEMA

Key Concept

Order of Operations

- Step 1** Evaluate expressions inside grouping symbols.
- Step 2** Evaluate all powers.
- Step 3** Do all multiplications and/or divisions from left to right.
- Step 4** Do all additions and/or subtractions from left to right.

Whiteboards:

$$x=5, y=1, z=3, a=5/8, b=3/8$$

Evaluate each expression if

1. $x + 7$

2. $3x - 5$

3. $x + y^2$

4. $x^3 + y + z^2$

5. $6a + 8b$

6. $23 - (a + b)$

7. $\frac{y^2}{x^2}$

8. $2xyz + 5$

9. $x(2y + 3z)$

Evaluate each expression

$$x=5, y=1, z=3, a=5/8, b=3/8$$

10. $(10x)^2 + 100a$

11. $\frac{3xy - 4}{7x}$

12. $a^2 + 2b$

$$x=5, y=1, z=3, a=5/8, b=3/8$$

Evaluate each expression if

16. $\frac{25ab + y}{xz}$

17. $\frac{5a^2b}{y}$

18. $(z \div x)^2 + ax$
 $\div$

