

Day 1: Order of Operations & Linear Equations

1) A few things we need to remember:

A. Order of Operations

Paranthesis

Exponents

Multiply/Divide

Add/Subtract

B. Grouping Symbols (these function just like Paranthesis)

Examples of Grouping Symbols:

-Absolute Value

-Roots

-Brackets

-Fractions (Numerator/Denominator)

Evaluate each expression.

2) $(15 - 5 + 2) \div 3 \cdot 6$

3) $(5 \div (6 - 1) + 1) \cdot 6$

4) $6 - (4 + 5 - (2 + 2))$

5) $3(5 + 4) - (2 + 5)$

6) $-\frac{18}{-6 - 1 + 4 - -6}$

7) $\frac{(-10 + 5) \cdot 2}{2} \cdot -2$

8) $3^2 - \frac{4}{-4} + 2 - (4 + 3 - 2)$

9) $5 + (4)(-5) - 3 - ((-3)^3 - -6) - -4$

10) $-6 - -2 - \frac{12 \cdot 2}{|(-2)^2|}$

11) $3 \cdot 6 \cdot -\frac{8}{4 - 3 - |5|}$

12) C. Solving Linear Equations

Combine Like Terms

Use Order of Operations BACKWARDS to UNDO operations

SHOW YOUR WORK ON EVERY STEP

Solve each equation.

13) $-2x + 1 + 6 = -1$

14) $-8p - 3p = 0$

15) $-4m - 7(8 - 8m) = -368$

16) $-6r + 8(6 + 3r) = 174$

17) $5(4 + 4x) = -28 + 8x$

18) $-6n + 2(3n + 6) = 8n + 4$

19) $-3(7 - 2x) - 1 = -22 + 6x$

20) $5(n - 6) = -34 + 5n$