Solving Multi-Step Equations (Variable on One Side)

(Math 7+)

The Steps

1) Distribute anything that can be distributed.

2) Combin**ALL** like terms. Do not combine like terms on diffe sides of the equal sign!

3) "Eliminate" the Constant (the number alone) by Addition or Subtraction

4) "Eliminate" the Coefficient (number with the variable) by Multiplication or Division

Combining Like Terms

Example 1: 8d - 3 - 5d = 9

Combining Like Terms

11x + 4 - 6x = 9

-15r + 2 + 4r - 8 = 16

You Try!!!

9c + (-2) -6c = 4

4b - 16 + 3b = 47

You Try!!!

2.5t + (-3.5t) - 4 = 56

0.85k + 0.3 - 0.25k = 0.9

You Try!!!

$2s+\frac{3}{5}+\frac{1}{5}=1\frac{2}{5}$

$\frac{1}{2}d-\frac{3}{4}d+2=6$

Distribute and Solve

Example 1: **5(x - 7) = 90**

Distribute and Solve

Example 2: **8e + 3(5 - e) = 10**

You Try!!!

$4+\frac{1}{4}(x-8)=\frac{1}{8}$

$-2\left(1-\frac{a}{4}\right)=\frac{1}{8}$

Challenge You Try!!!

$4x^2-2=62$

Challenge You Try!!!

$2(x^2-8)=184$