

**Multi-Step Equations with Variables on Both Sides - CLASS EXAMPLES****Simplify each expression.**

1)  $1 + 3x + 2x - 3$

2)  $3 - (7x + 5)$

3)  $-8(k - 5) - k$

4)  $7(x - 3) - 8$

**Solve each equation.**

5)  $2x + 4x = 6$

6)  $-3r - 7 + 2r = -9$

7)  $4(2b + 4) = 48$

8)  $45 = -3 + 3(4 + 3n)$

### Introduction to Fraction Busters!

$$9) \frac{5}{7} + \frac{x}{7} = \frac{8}{7}$$

### More Fraction Busters!

$$10) \frac{n}{5} - \frac{3n}{10} = \frac{1}{5}$$

$$11) \frac{2}{3} + \frac{3m}{5} = \frac{31}{15}$$

### Solve each equation.

$$12) -14 + 3r = 8r + 1$$

$$13) 1 - 7n = 1 + 5n$$

$$14) 32 + 4n = 4(7 + n) + 4$$

$$15) -43 - 6b = -6(b + 6)$$

## Multi-Step Equations with Variables on Both Sides - CLASS EXAMPLES

**Simplify each expression.**

1)  $1 + 3x + 2x - 3$

$-2 + 5x$

2)  $3 - (7x + 5)$

$-7x - 2$

3)  $-8(k - 5) - k$

$-9k + 40$

4)  $7(x - 3) - 8$

$7x - 29$

**Solve each equation.**

5)  $2x + 4x = 6$

$\{1\}$

6)  $-3r - 7 + 2r = -9$

$\{2\}$

7)  $4(2b + 4) = 48$

$\{4\}$

8)  $45 = -3 + 3(4 + 3n)$

$\{4\}$

## Introduction to Fraction Busters!

$$9) \frac{5}{7} + \frac{x}{7} = \frac{8}{7}$$

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## Solve each equation.

$$12) -14 + 3r = 8r + 1$$

$\{-3\}$

$$13) 1 - 7n = 1 + 5n$$

$\{0\}$

$$14) 32 + 4n = 4(7 + n) + 4$$

$\{\text{All real numbers.}\}$

$$15) -43 - 6b = -6(b + 6)$$

$\text{No solution.}$