Multi-Step Equations-Variables on Both Sides
Multi Step Equations

Solving multi-step equations---Variables on both sides

Step 1-2: Simplify EACH side, if necessary.

- Use _____ to get rid of _____.

- _____.

Step 3-4: _____ OR _____ on BOTH sides of equations to

- MOVE _____ TO ONE SIDE.

- MOVE _____ TO THE OTHER SIDE.

Step 5: UNDO _____ or _____.

EXAMPLES of solve multi-step equations with variables on BOTH sides:

(1) $16 + 2t = 5t + 7$

(2) $5x - 2 = 8x + 4$

solution:

solution:

(3) $-10 + x + 4 - 5 = 7x - 5$

(4) $-7x - 3x + 2 = -8x - 8$

solution:

solution:

(5) $7(5x - 4) - 1 = 14 - 8x$

(6) $-8x + 4(1 + 5x) = -6x - 14$

solution:

solution:

(7) $8x + 4(4x - 3) = 4(6x + 4) - 4$

solution:

DO NOW!

Solving the following equations.

(1) $6x + 7 = 13 + 7x$

(2) $13 - 4x = 1 - x$

solution:

(3) $x - 1 = 5x + 3x - 8$

solution:

(4) $5x + 38 = 2(1 + 7x)$

solution:

(5) $3x - 5 = -8(6 + 5x)$

solution:

(6) $2(4x - 3) - 8 = 4 + 2x$

solution:

(7) $-16 + 5x = -7(-6 + 8x) + 3$

solution:

(8) $-4x + 2(5x - 6) = -3x - 39$

solution:

(9) $-10x + 3(8 + 8x) = -6(x - 4)$

solution:

(10) $12(2x + 11) = 12(2x + 12)$

solution:

solution: