Multi-Step Equations-Variables on One Side

Solving multi-step equations---Variables on one side

Step 1: Simplify EACH side, if necessary.

- Use _____ to get rid of _____.

- _____.

Step 2: _____ OR _____ on both sides

of the equations to move _____ to one side

AND variables stay the other side.

Step 3: UNDO _____ or _____.

EXAMPLES of solve multi-step equations with variables on one side:

(1) $6a + 5a = -11$

(2) $6r - 1 + 6r = 23.$

solution:

solution:

(3) $3(3x - 6) = 18$

(4) $30 = -5(6n + 6)$

solution:

solution:

(5) $-3 + 5(x + 6) = 37$

(6) $-13 = 5(1 + 4m) - 2m$

solution:

solution:

DO NOW!

Solving the following equations.

(1) $6x + 2x = 16$

solution:

(3) $r - 2 + 8r = 16$

solution:

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

solution:

(7) $-20 = 10(1 + 3b)$

solution:

(9) $5x + 3(x + 4) = 28$

solution:

(11) $-5x - 8(1 + 7x) = -8$

solution:

(2) $-10x + 9x = 12$

solution:

(4) $4x + 6 + 3 = 17$

solution:

(6) $6(1 - 5v) = 54$

solution:

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

solution:

(10) $8x - 4(x + 8) = 8$

solution:

(12) $3(x - 1) + 2(-y + 3) = 13$

solution: