

Chapter 3 section 5
Solving equations

Combine like terms:

Example 1: page 208

$$7x - 11x = 12$$

$$-6x - 5x = 22$$

Example 2

$$12 = 5x - (4 + x)$$

$$11 = 3x - (1 - x)$$

Variable on both sides

Goal: Get the variables on one side of the equal sign.

Example 3: Page 209

$$5x = 3x - 18$$

$$4x - 3 = x$$

Example 4: page 21

$$5x = 3 + 6x$$

$-x = c$ another way to write?

a) multiply both sides by -1

b) negate each side

$$-(-x) = -c$$

Other problems

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$$6x - 5 = 12x + 19$$

page 212

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

Problems:

1) $5x - 3x = -18$

2) $4x = 3 + x$

3) $5x - 3 = 6x$

4) $2x + 3 = 18 - 3x$

5) $7x - 5x = -6$

6) $-9x + x = -8$

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

8) $1 - 8(x - 8) = 17$

9) $-7x + 6(x + 8) = -2$

10) $7 - 2(x + 4) = -1$

11) $4(-7x + 5) + 8 = 3(-9 - 1) - 2$

12) $5(5x - 2) = 4(8x + 1)$

13) $6x - 5 = 19$

14) $4x = -12$

15) $4x - 4 = 12$

16) $2x = -18$