## Lesson 2-3 Solving Equations (Two-Step)

## Warm Up:

1. Which are equivalent to z + (z + 6)? [Select all that apply.]

a. 
$$(z + z) + (z + 6)$$

- b. (z + 6) + 6
- c. None of the above.

2. Which are equivalent to 3(4h+2k)? [Select all that apply.]

a. 
$$3(2k + 4h)$$

b. 
$$3(4k + 2h)$$

c. None of the above.

## Solving linear equations

- Solve by applying \_\_\_\_\_ operations to \_\_\_\_\_ the variable.
- Undo \_\_\_\_\_\_ or \_\_\_\_ and THEN \_\_\_\_\_ or \_\_\_\_.

Guided Example: Solve for x.

1. 
$$5x + 8 = 23$$

2. 
$$\frac{7}{3}x - 6 = 8$$

**Practice:** Solve each of the following "two-step" linear equations by performing <u>inverse</u> <u>operations</u>. Keep in mind- your goal is to isolate the variable. Show all steps neatly.

(a) 
$$\frac{x}{3} - 7 = -2$$

(b) 
$$4x + 3 = -17$$

(c) 
$$5x + 12 = 87$$

(d) 
$$\frac{x+7}{3} = 2$$

(e) 
$$-6(x-1) = 18$$

(f) 
$$\frac{3}{4}x - 5 = 4$$