## Practice Quiz C: Solving equations

Name

Solve the following equations for x.

1. 
$$\frac{x}{5}$$
 + 2 = -4

2. 
$$\frac{2}{3}x - 5 = 3$$

3. 
$$-2 + 5x = 13$$

4. 
$$2x + 8 = -10$$

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

6. 
$$\frac{2}{5}(2x-3) = 2$$

7. 
$$7x - 2x - 7 = -17$$

8. 
$$-15 = -3x + 8x + 10$$

9. 
$$-2x + 6(3x + 1) = -26$$

Find x if 
$$f(x) = 3$$
 and  $f(x) = -5x - 7$ 

11. 
$$10 + 3x = 6x - 5$$

12. 
$$3(5x-9) = 5x - 12$$

13. 
$$-10 + 6x + 3x = 5 - 4x - 2x$$

Movie Tickets: A movie theater has a total of 351 seats. For a special Saturday night preview, they reserve 39 seats to give away to their VIP guests at no charge. If x represents the number of tickets they can sell for the preview, then x can be found by solving the equation x + 39 = 351

10.

A.) Solve the equation for  $\boldsymbol{x}$ .

B.) If tickets for the preview are \$11.50 each, what is the maximum amount of money they can make from ticket sales?