NAME DATE PERIOD

## Unit 6, Lesson 20

## **Practice Problems**

- 1. Andre says that 10x + 6 and 5x + 11 are equivalent because they both equal 16 when x is 1. Do you agree with Andre? Explain your reasoning.
- 2. Select **all** expressions that can be subtracted from 9x to result in the expression 3x + 5.

A. 
$$-5 + 6x$$

B. 
$$5 - 6x$$

c. 
$$6x + 5$$

D. 
$$6x - 5$$

E. 
$$-6x + 5$$

3. Select **all** the statements that are true for any value of x.

A. 
$$7x + (2x + 7) = 9x + 7$$

B. 
$$7x + (2x - 1) = 9x + 1$$

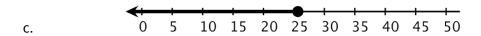
c. 
$$3x + (10 - 3x) = 10$$

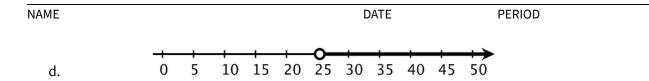
D. 
$$5x - (8 - 6x) = -x - 8$$

E. 
$$4x - (2x + 8) = 2x - 8$$

F. 
$$6x - (2x - 4) = 4x + 4$$

- 4. For each situation, would you describe it with x < 25, x > 25,  $x \le 25$ , or  $x \ge 25$ ?
  - a. The library is having a party for any student who read at least 25 books over the summer. Priya read x books and was invited to the party.
  - b. Kiran read x books over the summer but was not invited to the party.





5. Consider the problem: A water bucket is being filled with water from a water faucet at a constant rate. When will the bucket be full? What information would you need to be able to solve the problem?