

## 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.  $\frac{1}{2}x + (3 - \frac{1}{2}x) = 3$
  - D.  $5x - (8 - 6x) = -x - 8$
  - E.  $0.4x - (0.2x + 8) = 0.2x - 8$
  - F.  $6x - (2x - 4) = 4x + 4$

4. For each situation, would you describe it with  $x < 25$ ,  $x > 25$ ,  $x \leq 25$ , or  $x \geq 25$ ?

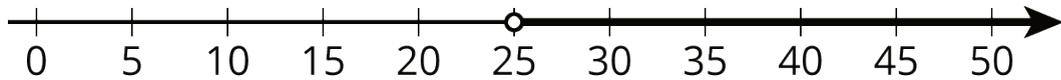
a. The library is having a party for any student who read at least 25 books over the summer. Priya read  $x$  books and was invited to the party.

b. Kiran read  $x$  books over the summer but was not invited to the party.

c.



d.



(From Unit 6, Lesson 13.)

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?

(From Unit 2, Lesson 9.)