## Unit 6, Lesson 20: Combining Like Terms (Part 1)

1. Andre says that $10 x+6$ and $5 x+11$ 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 $9 x$ to result in the expression $3 x+5$.
A. $-5+6 x$
B. $5-6 x$
C. $6 x+5$
D. $6 x-5$
E. $-6 x+5$
3. Select all the statements that are true for any value of $x$.
A. $7 x+(2 x+7)=9 x+7$
B. $7 x+(2 x-1)=9 x+1$
C. $3 x+(10-3 x)=10$
D. $5 x-(8-6 x)=-x-8$
E. $4 x-(2 x+8)=2 x-8$
F. $6 x-(2 x-4)=4 x+4$
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)
