## Unit 4 Lesson 9 Cumulative 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 $3x+5$.
	1. $-5+6x$
	2. $5−6x$
	3. $6x+5$
	4. $6x−5$
	5. $-6x+5$
3. Select **all** the statements that are true for any value of $x$.
	1. $7x+(2x+7)=9x+7$
	2. $7x+(2x−1)=9x+1$
	3. $\frac{1}{2}x+(3−\frac{1}{2}x)=3$
	4. $5x−(8−6x)=-x−8$
	5. $0.4x−(0.2x+8)=0.2x−8$
	6. $6x−(2x−4)=4x+4$
4. For each situation, would you describe it with $x<25$, $x>25$, $x\leq 25$, or $x\geq 25$?
	1. 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.
	2. Kiran read $x$ books over the summer but was not invited to the party.
	3.
	* 
	1.
	* 
* (From Unit 4, Lesson 3.)
1. A line is represented by the equation $\frac{y}{x−2}=\frac{3}{11}$. What are the coordinates of some points that lie on the line? Graph the line on graph paper.
* (From Unit 2, Lesson 17.)
1. Select **all** the statements that must be true for *any* scaled copy Q of Polygon P.
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	1. The side lengths are all whole numbers.
	2. The angle measures are all whole numbers.
	3. Q has exactly 1 right angle.
	4. If the scale factor between P and Q is $\frac{1}{5}$, then each side length of P is multiplied by $\frac{1}{5}$ to get the corresponding side length of Q.
	5. If the scale factor is 2, each angle in P is multiplied by 2 to get the corresponding angle in Q.
	6. Q has 2 acute angles and 3 obtuse angles.
* (From Unit 2, Lesson 3.)



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