## Unit 7 Lesson 10 Cumulative Practice Problems

1. There is a closed carton of eggs in Mai's refrigerator. The carton contains $e$ eggs and it can hold 12 eggs.
	1. What does the inequality $e<12$ mean in this context?
	2. What does the inequality $e>0$ mean in this context?
	3. What are some possible values of $e$ that will make both $e<12$ and $e>0$ true?
2. Here is a diagram of an unbalanced hanger.
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	1. Write an inequality to represent the relationship of the weights. Use $s$ to represent the weight of the square in grams and $c$ to represent the weight of the circle in grams.
	2. One red circle weighs 12 grams. Write an inequality to represent the weight of one blue square.
	3. Could 0 be a value of $s$? Explain your reasoning.
	4. Jada is taller than Diego. Diego is 54 inches tall (4 feet, 6 inches). Write an inequality that compares Jada’s height in inches, $j$, to Diego’s height.
	5. Jada is shorter than Elena. Elena is 5 feet tall. Write an inequality that compares Jada’s height in inches, $j$, to Elena’s height.
* (From Unit 7, Lesson 8.)
1. Tyler has more than $10. Elena has more money than Tyler. Mai has more money than Elena. Let $t$ be the amount of money that Tyler has, let $e$ be the amount of money that Elena has, and let $m$ be the amount of money that Mai has. Select **all** statements that are true:
	1. $t<j$
	2. $m>10$
	3. $e>10$
	4. $t>10$
	5. $e>m$
	6. $t<e$
2. Which is greater, $\frac{-9}{20}$ or -0.5? Explain how you know. If you get stuck, consider plotting the numbers on a number line.
* (From Unit 7, Lesson 3.)
1. Select **all** the expressions that are equivalent to $\left(\frac{1}{2}\right)^{3}$.
	1. $\frac{1}{2}⋅\frac{1}{2}⋅\frac{1}{2}$
	2. $\frac{1}{2^{3}}$
	3. $\left(\frac{1}{3}\right)^{2}$
	4. $\frac{1}{6}$
	5. $\frac{1}{8}$
* (From Unit 6, Lesson 13.)



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