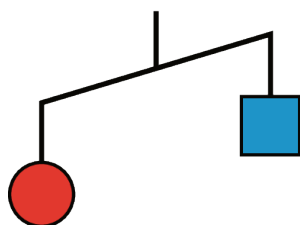


Lesson 3 Practice Problems

1. There is a closed carton of eggs in Mai's refrigerator. The carton contains e eggs and it can hold 12 eggs.

- What does the inequality $e < 12$ mean in this context?
- What does the inequality $e > 0$ mean in this context?
- 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.



- 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.
- One red circle weighs 12 grams. Write an inequality to represent the weight of one blue square.
- Could 0 be a value of s ? Explain your reasoning.

3. Here is an inequality: $-3x > 18$.

- List some values for x that would make this inequality true.
- How are the solutions to the inequality $-3x \geq 18$ different from the solutions to $-3x > 18$? Explain your reasoning.

4. 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:

A. $t < j$

B. $m > 10$

C. $e > 10$

D. $t > 10$

E. $e > m$

F. $t < e$

5. For each inequality, find two values for x that make the inequality true and two values that make it false.

a. $x + 3 > 70$

b. $x + 3 < 70$

c. $-5x < 2$

d. $5x < 2$