

1. Priya looks at the inequality $12 - x > 5$ and says “I subtract a number from 12 and want a result that is bigger than 5. That means that the solutions should be values of x that are smaller than something.” Do you agree with Priya? Explain your reasoning and include solutions to the inequality in your explanation.

2. When a store had sold $\frac{2}{5}$ of the shirts that were on display, they brought out another 30 from the stockroom. The store likes to keep at least 150 shirts on display. The manager wrote the inequality $\frac{3}{5}x + 30 \geq 150$ to describe the situation.
 - A. Explain what $\frac{3}{5}$ means in the inequality.

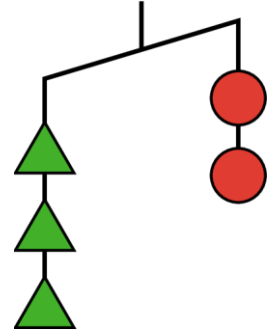
 - B. Solve the inequality.

 - C. Explain what the solution means in the situation.

3. You know x is a number less than 4. Select **all** the inequalities that *must* be true. (from Unit 6, Lesson 13)
 - a. $x < 2$
 - b. $x + 6 < 10$
 - c. $5x < 20$
 - d. $x - 2 > 2$
 - e. $x < 8$

4. Here is an unbalanced hanger. (from Unit 6, Lesson 13)

- A. If you knew each circle weighed 6 grams, what would that tell you about the weight of each triangle? Explain your reasoning.



- B. If you knew each triangle weighed 3 grams, what would that tell you about the weight of each circle? Explain your reasoning.