Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6th Grade Inequality Practice

**Write an inequality for the given situations below. Then write 3 numbers that would make the situation true.**

The temperature was less than 32° Fahrenheit.

Inequality: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Numbers: \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_

The school track team must have at least 10 runners to compete at the meet.

Inequality: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Numbers: \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_

An elevator can carry no more than 15 people.

Inequality: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Numbers: \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_

**Which statement can be modeled by x + 3 12?**

1. Sam has 3 bottles of water. Together, Sam and Dave have at most 12 bottles of water.
2. Jennie sold 3 cookbooks. To earn a prize, Jennie must sell at least 12 cookbooks.
3. Peter has 2 baseball hats. Peter and his brothers have fewer than 12 baseball hats.
4. Kathy swam 3 laps in the pool this week. She must swim more than 12 laps.

**Write an inequality that represents the situation, then solve.**

Natasha wants to treat her friends to the movies. The movie tickets cost $11 each and she also wants to spend $21 worth of popcorn and candy for her friends to share. She can spend under $131. Write an inequality to represent how many people she can treat to the movies. Solve the inequality.

A band wants to create a CD of their last concert. To create the CDs, the cost will be $350 advertisement fee plus $3 per CD. Write an inequality that represents how many CDs they can buy with a maximum of $1225. Solve the inequality.

A company wants to order company polos at a discount. The cost will include $24 per shirt and a $50 delivery fee. Write an inequality that represents how many shirts they must buy if they spend a minimum of $200 in order to receive the discount.

The length of a rectangle is 5 times its width. The perimeter of the rectangle is at most 104 meters. Write an inequality that represents the greatest possible dimensions of this rectangle.

**Challenge:**

Members of the band boosters are planning to sell programs at football games. The cost to print the programs is $150 plus $0.50 per program. They plan to sell each program for $2. Write an inequality for the situation. How many programs must they sell to make a profit of at least $500?

A club can buy ready-made shirts for $14.50 each. Alternately, it can buy plain T-shirts for $6.25 each, fabric paint for $35.70, and a pack of stencils for $8.50. Write an inequality to represent the situation. For how many shirts is stenciling plain T-shirts cheaper than buying ready-made shirts?