**Chapter 4 Practice Test: Inequalities**

NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Graph the following inequality statements:**

1. 2.

**Write the inequality statement for the given graph:**

3. 4.

 Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **Write the word sentence as an inequality.**

**5.** A number *n* is no more than 8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**6.** Twice a number x minus 1 is less than or equal to 5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**7**. The quotient of a and 2 is not less than 5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Tell whether the given value is a solution of the inequality. Show substitution and write “yes” or “no”.**

**8.** 5x - 5 > 62; x = 11  **9.** 

**Solve the inequalities (no graph!):**

**10. 11.** 

**12.**  -3(v – 3) + 4v < 5 **13.** −0.6 > −0.3(d + 6)

**Solve the Inequality. Graph the solution.**

**14.**

**15.** 

**16.** -4(6x + 7) + 6 ≥ 122

**17.** The perimeter of the rectangle is at least 20 inches. Write and solve an inequality for this situation:

7 in

x + 1

**18.**  The area of the rectangle is less than 48 m2. Write and solve an inequality for this situation:

7 m

x + 3

**19.** You have $30 to buy baseball cards. Each pack of cards costs $5. Define a variable, then write and solve an inequality that represents the number of packs of baseball cards you can buy and still have at least $10 left. Remember units!

**20.** You can spend no more than $100 on a party you are hosting. The cost per guest is $8. Define your variable, then write and solve an inequality that represents the number of guests you are inviting. Remember units!