Name _____ Date _____

Chapter 4

Take Home Quiz #1

For use after Section 4.2

Write the word sentence as an inequality.

1. A number b subtracted from 9.8 is greater than -4.
2. The quotient of a number y and -3.6 is less than 6.5.

Tell whether the given value is a solution of the inequality.

3. $x - 2 \geq -1.6; x = 0.8$
4. $-\frac{2}{5}c < 9; c = -25$

Graph the inequality on a number line.

5. $x \geq -2$

6. $a > 1.5$

7. $k < \frac{2}{3}$

Solve the inequality. Graph the solution.

8. $x - \frac{4}{5} > \frac{1}{5}$

9. $\frac{1}{2} + x < 4$

10. $c - 2.8 \geq -0.3$

11. A person who is at least 65 years old is often considered a senior citizen. Write an inequality that represents this situation.
12. The solution of $x + b > -14$ is $x > -21$. What is the value of b?
13. Your gas tank can hold no more than 14.5 gallons of gasoline. On a trip to the grocery store, you use 1.5 gallons of gasoline. Write and solve an inequality that represents the amount of gasoline left in your gas tank.
14. The requirements for a roller coaster are shown.

Roller Coaster Requirements

1. At least 5 feet tall
2. Weigh no more than 350 pounds
3. Must be 16 years or older

   a. Write and graph three inequalities that represent the requirements.

   b. You are 64 inches tall. Do you satisfy the height requirement for the roller coaster? Explain.

Answers

1. _____
2. _____
3. _____
4. _____
5. See left.
6. See left.
7. See left.
8. _____
   See left.
9. _____
   See left.
10. _____
    See left.
11. _____
12. _____
13. _____
14. a. _____
    See left.
    b. _____

Name _____ Date _____

Chapter 4

Take Home Quiz #2

For use after Section 4.4

Solve the inequality. Graph the solution.

1. $4c < 28$

2. $\frac{x}{-2} > 4$

3. $-15y \leq -45$

4. $-1.2b \geq 4.8$

Write the word sentence as an inequality. Then solve the inequality.

5. The product of a number and -5 is at least 35.

6. A number divided by 3 is no more than 12.

Solve the inequality. Graph the solution.

7. $3t - 1 < 8$

8. $1.6w + 1.7 \geq 4.9$

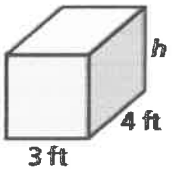
9. $-\frac{k}{4} - 5 \leq -2$

10. $\frac{x}{3} + \frac{2}{3} > \frac{1}{6}$

11. You need to score at least 1500 points on your new video game to obtain the high score. You get 300 points after completing each level. Write and solve an inequality to find the number of levels you must beat in order to obtain the high score.

12. A baseball team has 30 players. They need to make cuts so that there are at most 25 baseball players on the team. Write and solve an inequality to find the number of players that must be cut from the team.

13. The volume of the rectangular prism must be at least 36 cubic feet. Write and solve an inequality that represents the value of h.



Answers

1. _____
   See left.
2. _____
   See left.
3. _____
   See left.
4. _____
   See left.
5. _____
6. _____
7. _____
   See left.
8. _____
   See left.
9. _____
   See left.
10. _____
    See left.
11. _____
12. _____
13. _____