3.1 Puzzle Time

What Do You Call A Bull That's Sleeping?

Write the letter of each answer in the box containing the exercise number.

Write the word sentence as an inequality.

1. A number x is greater than 25.8.

2. Twice a number x is at most $-\dfrac{3}{5}$.

3. A number x minus 9.3 is more than 4.6.

4. A number x added to 11.7 is less than 14.

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

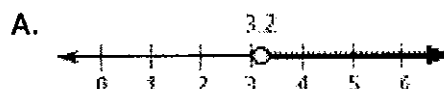5. $x - 3.6 \leq 2.8$; $x = 6.7$

6. $\dfrac{5}{6}x > -10$; $x = -6$

Match each inequality with its graph.

7. $x \leq -7$

8. $x > 3.2$

9. $x < 3\dfrac{1}{4}$
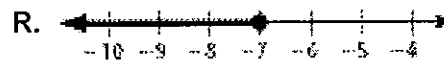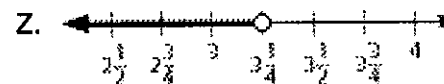
10. $x \geq -\sqrt{121}$

Answers

U. $11.7 + x < 14$

L. $x > 25.8$

A.

D. yes

E. $2x \leq -\dfrac{3}{5}$

R.

L. $x - 9.3 > 4.6$

Z.

B. no

O.
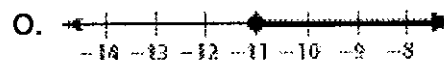
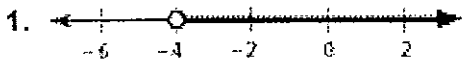| 8		5	4	1	3	6	10	9	2	7

3.1 Practice B

Write an inequality for the graph. Then, in words, describe all the values of x that make the inequality true.

1.

2.
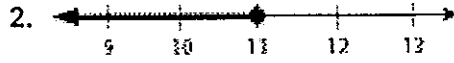
Write the word sentence as an inequality.

3. A number x is at least 15.

4. A number r added to 3.7 is less than 1.2.

5. A number h divided by 2 is more than -5.

6. A number a minus 8.2 is no greater than 12.

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

7. $p + 1.7 \geq -4$; $p = -9$

8. $-3y < -5$; $y = 1$

9. $1.5g \leq 6$; $g = 0$

10. $\frac{3}{4} - d > \frac{1}{3}$; $d = \frac{1}{2}$

Graph the inequality on a number line.

11. $\ell \leq 3.5$

12. $m > -15$

13. To get a job at the local restaurant, you must be at least 16 years old. Write an inequality that represents this situation.

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

14. $5t < 4 - t$; $t = -3$

15. $\frac{q}{5} < q - 20$; $q = 15$

16. In order to qualify for a college scholarship, you must have acceptable scores in either the SAT or the ACT along with the following requirements: a minimum GPA of 3.5; at least 12 credits of college preparatory academic courses; and at least 75 hours of community service.

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

    b. Your cousin has a GPA of 3.6, 15 credits of college preparatory class, and 65 hours of community service. Other than the test scores, does your cousin satisfy the requirements? Explain.