

3 Chapter Test



Write the word sentence as an inequality.

1. A number j plus 20.5 is greater than or equal to 50.
2. A number r multiplied by $\frac{1}{7}$ is less than -14 .

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

3. $v - 2 \leq 7$; $v = 9$
4. $\frac{3}{10}p < 0$; $p = 10$
5. $-3n \geq 6$; $n = -3$

Solve the inequality. Graph the solution.

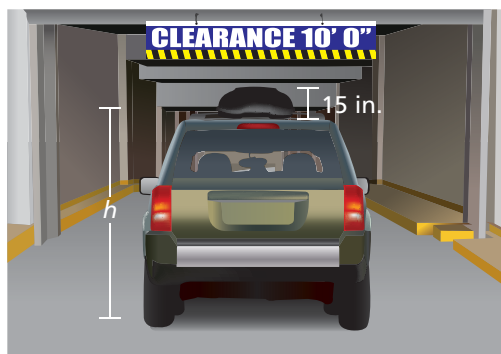
6. $n - 3 > -3$
7. $x - \frac{7}{8} \leq \frac{9}{8}$
8. $-6b \geq -30$
9. $\frac{y}{-4} \geq 13$
10. $3v - 7 \geq -13.3$
11. $-5(t + 11) < -60$
12. $3 \leq x + 5 \leq 9$
13. $3x - 2 \leq 4$ or $x - 4 \geq 6$
14. $|x + 5| < 12$

Graph the inequality in a coordinate plane.

15. $x > -6$
16. $y < 2$
17. $x \geq -1$
18. $3x + y \geq 7$
19. $4x + 2y \leq 8$
20. $3x - 9y > 18$

21. **VOTING** U.S. citizens must be at least 18 years of age on Election Day to vote. Write an inequality that represents this situation.

22. **GARAGE** The vertical clearance for a hotel parking garage is 10 feet. Write and solve an inequality that represents the height (in feet) of the vehicle.



23. **TRADING CARDS** You have \$25 to buy trading cards online. Each pack of cards costs \$4.50. Shipping costs \$2.95. Write and solve an inequality to find the number of packs of trading cards you can buy.

24. **SCIENCE QUIZZES** The table shows your scores on four science quizzes. What score do you need on the fifth quiz to have a mean score of at least 80?

Quiz	1	2	3	4	5
Score (%)	76	87	73	72	?