

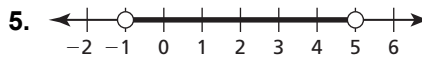
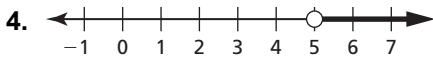
**Chapter
2**

Test B

Write the sentence as an inequality.

1. The product of a number n and 2 is no less than 14.
2. The speed s on a highway is at most 60 miles per hour.
3. The length r of a rope should be at least 28 inches.

Write an inequality that represents the graph.



Solve the inequality. Graph the solution.

6. $x + 5 \leq -2$



7. $4q > -28$



Solve the inequality.

8. $2k > 2k + 4$

9. $4p < 6p + 12$

10. $2.5w - 5 < 2w + 5$

11. $5(p - 1) > 6p - 7$

12. $5n + 3 \geq 4 - (6 - 5n)$

13. $5 - 2x < 4 - 2x + 3$

Solve the inequality. Graph the solution.

14. $5 + 2y < 8$ or $5y > 3y + 7$



15. $7 < 12 + c < 13$



Solve the inequality.

16. $-3p + 1 \leq -11$ or $-0.5p > 12$

17. $6 < 4 - w \leq 2w - 2$

18. $|3x + 15| < 6$

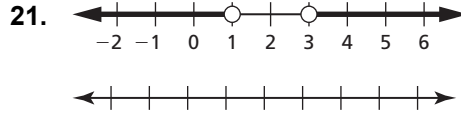
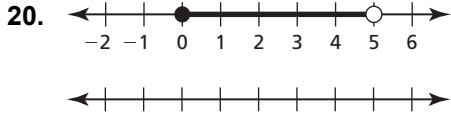
19. $3 - |x + 8| \geq 5$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. See left.
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. See left.
16. _____
17. _____
18. _____
19. See left.

Chapter 2 **Test B** (continued)

Write and graph a compound inequality that represents the numbers that are not solutions of the inequality represented by the graph shown.



- 22. You need to earn at least \$75. You earn \$6.00 for each hour you work. Write and solve an inequality that represents the number of hours h that you need to work.
- 23. You need at least 150 cups of lemonade but less than 225 cups of lemonade for a picnic. Each batch of lemonade makes 25 cups of lemonade. Write and solve an inequality that represents the number of batches b you need to make.
- 24. You have a goal to practice the piano for an average of at least 50 minutes per day for 1 week. The first 6 days you practice a total of 245 minutes. Write and solve an inequality that represents the number of minutes m you need to practice on the seventh day.
- 25. The cost to rent a construction crane is \$1500 per day plus \$250 per hour of use. Write and solve an inequality that can be used to determine the maximum number of hours h the crane can be used if the rental cost for one day will not exceed \$5000.

Answers

- 20. _____
See left.
- 21. _____
See left.
- 22. _____
- 23. _____
- 24. _____
- 25. _____