

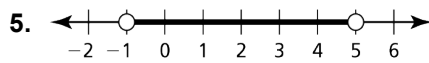
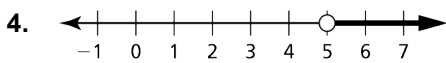
Write the sentence as an inequality.

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.

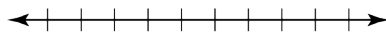
3. The length r of a rope should be at least 28 inches.

Write an inequality that represents the graph.

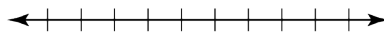


Solve the inequality. Graph the solution.

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

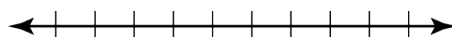
12. $5n + 3 \geq 4 - (6 - 5n)$

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

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

See left.

7. _____

See left.

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

See left.

15. _____

See left.

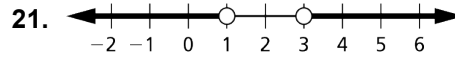
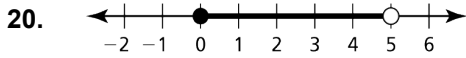
16. _____

17. _____

18. _____

19. _____

Write a compound inequality that represents the graph shown.



Answers

20. _____

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.

21. _____

22. _____

23. _____

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. _____

25. _____

24. You have a goal to practice the piano for an average of at least 50 minutes per day for one week. The first six 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.

Inequalities - Application
Algebra 1

Mount Si High School Name: _____
Fall 2015 Date: _____ Period: _____