

Lesson 6 Skills Practice

Inequalities

Write an inequality for each sentence.

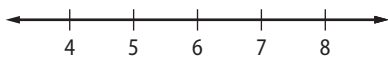
1. More than 100,000 fans attended the opening football game at The Ohio State University.
2. Her earnings at \$16 per hour were no more than \$96.
3. A savings account decreased by \$50 is now less than \$740.
4. A number increased by 7 is at least 45.

For the given value, state whether each inequality is *true* or *false*.

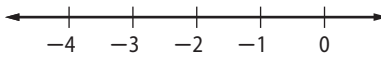
- | | |
|------------------------------|--------------------------------|
| 5. $\frac{18}{c} < 9, c = 2$ | 6. $\frac{x}{5} \geq 3, x = 5$ |
| 7. $6k \geq 42, k = 7$ | 8. $10 - x < 3, x = 7$ |
| 9. $11 + n < 32, n = 4$ | 10. $9 + c > 19, c = 10$ |

Graph each inequality on a number line.

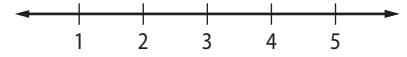
11. $a < 6$



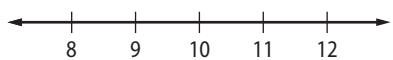
12. $t \geq -2$



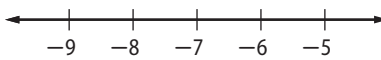
13. $d \leq 3$



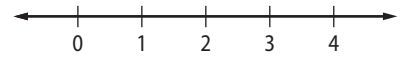
14. $b \geq 10$



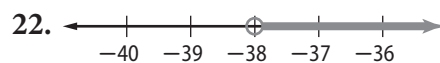
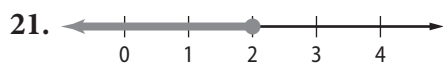
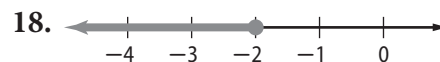
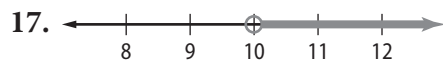
15. $x \geq -7$



16. $x > 2$



Write an inequality for each graph.



Lesson 7 Homework Practice

Solving Inequalities

Solve each inequality. Check your solutions.

1. $-6 \geq g + 4$

2. $15 + d > 10$

3. $p + (-8) \leq -12$

4. $-13 < k - (-16)$

5. $-1 + s \leq 5$

6. $12 > w - (-0.3)$

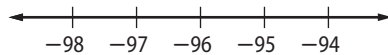
7. $-1\frac{7}{8} < d + (-2)$

8. $z - 0.9 > -4.8$

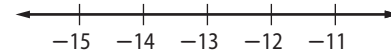
9. $b - \frac{1}{5} < 3\frac{1}{10}$

Solve each inequality. Graph each solution on a number line.

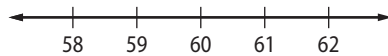
10. $24 \geq \frac{g}{-4}$



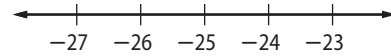
11. $-78 > 6h$



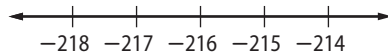
12. $\frac{f}{-5} < -12$



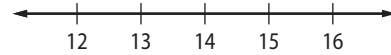
13. $100 \geq -4s$



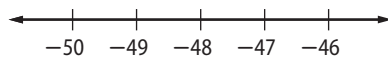
14. $\frac{p}{-36} < 6$



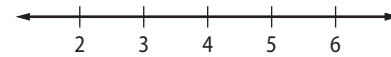
15. $-4 > \frac{c}{-3.5}$



16. $-24 < \frac{1}{2}b$



17. $-3 \leq \frac{c}{-1.5}$



18. A certain minivan has a maximum carrying capacity of 1200 pounds. If the luggage weighs 150 pounds, what is the maximum weight allowable for passengers?
19. To qualify for a store discount, Jorge's soccer team must spend at least \$560 for new jerseys. The team needs 20 jerseys.
- Write an inequality to represent how much the team should spend on each jersey to qualify for the discount.
 - How much should the team spend for each jersey?