

# Lesson 6 Homework Practice

## Inequalities

Write an inequality for each sentence.

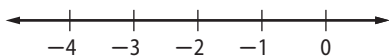
- More than 3400 people attended the flea market.
- Her earnings at \$11 per hour were no more than \$121.
- The 10-km race time of 84 minutes was at least twice as long as the winner's time.
- A savings account increased by \$70 is now more than \$400.

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

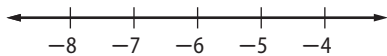
- |                                 |  |
|---------------------------------|--|
| 5. $9 - x > 3, x = 6.5$         | 6. $9.5 + n < 19, n = 10$                |
| 7. $3k < 27 \frac{1}{2}, k = 8$ | 8. $21 \leq 4c, c = 5.2$                 |
| 9. $\frac{x}{4} \leq 8, x = 32$ | 10. $\frac{9}{c} > 2, c = 3 \frac{1}{2}$ |

Graph each inequality on a number line.

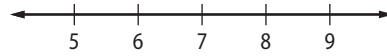
11.  $a < -2$



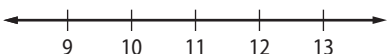
12.  $t > -6$



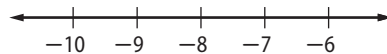
13.  $d \geq 7$



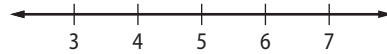
14.  $b \geq 11$



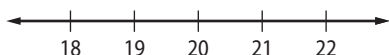
15.  $x \leq -8$



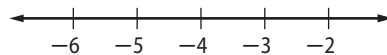
16.  $w > 5$



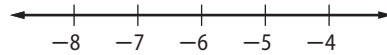
17.  $n < 20$



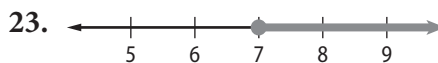
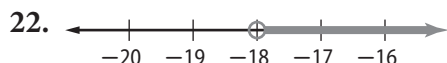
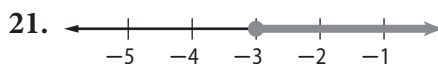
18.  $b \leq -4$



19.  $a \geq -6$



Write an inequality for each graph.



- The average time a human being can hold their breath underwater is 1 minute. A hippo can hold its breath underwater for at least 5 times as long as a human. Write an inequality that represents how long a hippo can hold its breath underwater.
- In the first hour of a charity auction, \$4800 was raised. This was at most \$1200 more than was raised in the second hour of the auction. Write an inequality that represents the amount raised in the second hour.