

Lesson 6 Homework Practice

Inequalities

Write an inequality for each sentence.

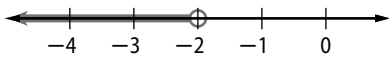
- More than 3400 people attended the flea market. $p > 3400$
- Her earnings at \$11 per hour were no more than \$121. $11h \leq 121$
- The 10-km race time of 84 minutes was at least twice as long as the winner's time. $84 \geq 2w$
- A savings account increased by \$70 is now more than \$400. $s + 70 > 400$

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

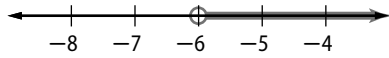
- $9 - x > 3, x = 6.5$ **false**
- $9.5 + n < 19, n = 10$ **false**
- $3k < 27 \frac{1}{2}, k = 8$ **true**
- $21 \leq 4c, c = 5.2$ **false**
- $\frac{x}{4} \leq 8, x = 32$ **true**
- $\frac{9}{c} > 2, c = 3 \frac{1}{2}$ **true**

Graph each inequality on a number line.

11. $a < -2$



12. $t > -6$



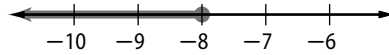
13. $d \geq 7$



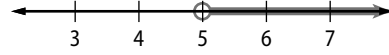
14. $b \geq 11$



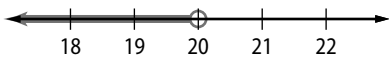
15. $x \leq -8$



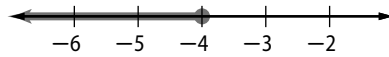
16. $w > 5$



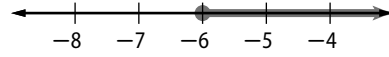
17. $n < 20$



18. $b \leq -4$



19. $a \geq -6$



Write an inequality for each graph.

20. $x < 13$

21. $x \geq -3$

22. $x > -18$

23. $x \geq 7$

- 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. $t \geq 5$
- 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. $a \leq 3600$