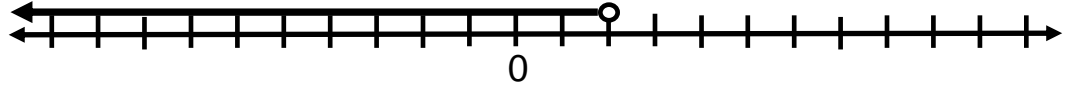## Solving Inequalities

Write the inequality illustrated by each graph.

1. _____
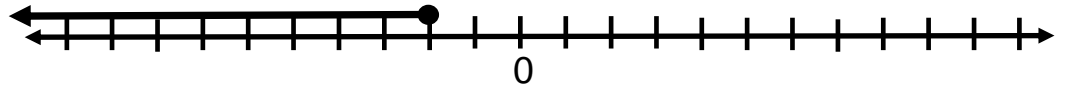
2. _____

3. _____
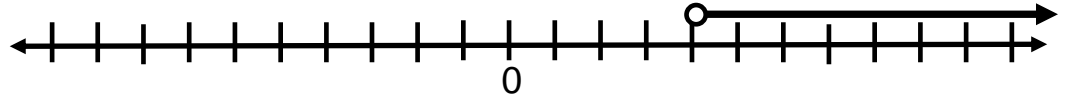
Solve each of the following inequalities and graph the solution.

4. $3x > 21$	5. $-2x < -10$
6. $-40 \geq -8x$	7. $\dfrac{x}{-2} \geq 8$
8. $-10x > -6$	9. $9 > -x + 8$
10. $\dfrac{1}{2}x \geq 7$	11. $2x + 21 \leq 11$

12. 6 < -2x + 2	13. x – 6 > -6
(number line)	(number line)
14. 3 ≤ 5 – 2x	15. 2x + 5 ≥ 2
(number line)	(number line)

16. For adults, the maximum safe water temperature in a spa is 104˚F. The water temperature in Bill's spa is 100˚F. How many degrees can Bill safely raise the temperature in his spa?

17. A local restaurant will deliver food to your house if the purchase amount of your order is at least $25.00. The total for your part of the order is $17.95. How much more must you spend for the restaurant to deliver your order?

18. The gas tank in Mindy's car holds at most 15 gallons. She has already filled the tank with 7 gallons of gas. If she continues to fill the tank, how many more gallons can Mindy add to the car's tank?