

4.1 HW

Date _____

Solve each inequality.

1) $-9 \leq n - 8$

2) $\frac{b}{6} > 7$

3) $6 - 3r + 5 \leq 8$

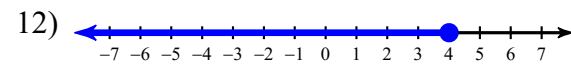
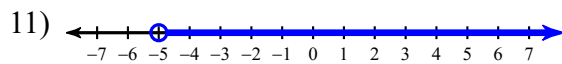
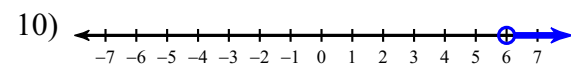
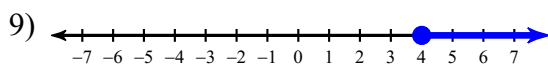
4) $p + 6p \leq 21$

5) $-7 - 6n \leq 1 - 7n$

6) $n - 4 - 1 > 4n - 4n$

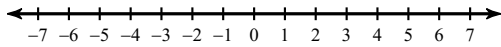
7) $88 > -8(-p - 7)$

8) $-8(r - 6) < 23 - 3r$

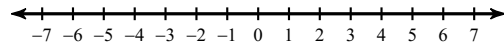
Write an inequality for each graph.

Draw a graph for each inequality.

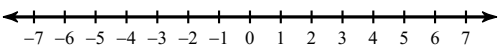
13) $p \leq 3$



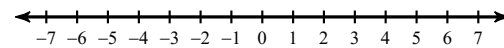
14) $b \geq 2$



15) $-3 < r$



16) $2 > x$



17) A prom ticket at Smith High School is \$120. Tom is going to save money for the ticket by walking his neighbor's dog for \$15 per week. If Tom already has saved \$22, what is the minimum number of weeks Tom must walk the dog to earn enough to pay for his prom ticket?

18) Chelsea has \$45 to spend at the fair. She spends \$20 on admission and \$15 on snacks. She wants to play a game that costs \$0.65 per game. Write an inequality to find the maximum number of times, x , Chelsea can play the game. Using the inequality, determine the maximum number of times she can play the game.

19) Mr. Braun has \$75 to spend on pizza and soda for a picnic. Pizza costs \$9 per pie and each drink costs \$0.75. Five times as many drinks as pizzas are needed. What is the maximum number of pizzas that Mr. Braun can buy?

20) The Eye Surgery Institute just purchased a new laser machine for \$500,000 to use during eye surgery. The Institute must pay the inventor \$550 each time the machine is used. If the Institute charges \$2,000 for each laser surgery, what is the minimum number of surgeries that must be performed in order for the Institute to make a profit?