






Activity 4: Exploring Inequality Statements:

- a. What is the solution set for $x - 1 > 6$. In other words, what value(s) of "x" make this statement true? Write both an inequality statement and graph your solution on a number line.
- b. What is the solution set for $2x < 6$. In other words, what value(s) of "x" make this statement true? Write both an inequality statement and graph your solution on a number line.
- c. What is the solution set for $3x - 7 \geq 13$. In other words, what value(s) of "x" make this statement true? Write both an inequality statement and graph your solution on a number line.
- d. Describe what you did to find the solution set.

Find the solution set for each inequality. Then graph the solution set. Scale the number lines appropriately.

1. $x + 8 \geq 18$	
2. $-2 + x \leq -16$	
3. $-28 < v - 10\frac{1}{2}$	
4. $4y > -8$	
5. $21 \leq 3p$	

6. $-15 > 2x$



7. $4r + 13 < 9$



8. $\frac{r-2}{3} > \frac{1}{3}$



9. $11 \geq 8 + 6n$



10. $5n - 75 \geq -135$



11. $18.\overline{66} + 2k \leq 10$














12. $-4 \geq 4x + 16$



6.3b Homework: Solve and Graph Inequalities

Solve to find the boundary. Then graph the inequalities below. Scale the number lines appropriately.

1. $n - 2 \leq 4$	
2. $-18 + n < -7$	
3. $20 \geq p + 16.5$	
4. $2x < 6$	
5. $-24 \leq 3p$	
6. $3y > 17$	
7. $-4 \geq -2 + 6n$	
8. $3x - 1 \leq 3$	
9. $21n - 63 > -126$	
10. $9.5 + 2n > -5$	
11. $2x - 1 > 6$	
12. $\frac{3}{4} > \frac{-2 + 2x}{4}$	