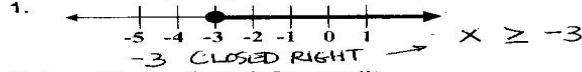


Write the inequality shown by the graph.



Solve. Show all work for credit.

2.  $x + \frac{2}{7} \geq \frac{6}{7}$   
 $\frac{-2}{7} \quad \frac{-2}{7}$   
 $x \geq \frac{4}{7}$

4.  $\frac{p}{2} < 60 - 2$   
 $p < 120$   
 $p < 120$

6.  $z + 7 + 4z \leq -3$   
 $5z + 7 \leq -3$   
 $\frac{5z}{5} \leq \frac{-10}{5}$   
 $z \leq -2$   
 $z \leq -2$

8.  $\frac{7x+1}{5} \geq 10 - 5$   
 $\frac{7x+1}{5} \geq 5$   
 $\frac{7x+1}{5} \geq 5$   
 $\frac{7x+1}{5} \geq 5$   
 $7x+1 \geq 25$   
 $7x \geq 24$   
 $x \geq \frac{24}{7}$   
 $x \geq \frac{24}{7}$

9.  $7x - 1 < 4x + 11$   
 $-4x + 1 - 4x + 1$   
 $3x < 12$   
 $\frac{3x}{3} < \frac{12}{3}$   
 $x < 4$   
 $x < 4$

**BONUS:** Solve the compound inequality and graph.

$5 < 3x - 1 \leq 11$   
 $+1 \quad +1 \quad +1$   
 $6 < 3x \leq 12$   
 $\frac{6}{3} < \frac{3x}{3} \leq \frac{12}{3}$   
 $2 < x \leq 4$   
 $2 < x \leq 4$

3.  $\frac{-4z}{-4} \geq \frac{12}{-4}$   $\div$  by neg change direction  
 $z \leq -3$

5.  $-3y - 8 > -2$   
 $\frac{-3y}{-3} > \frac{6}{-3}$  change direction  
 $y < -2$   
 $y < -2$

7.  $4(x+2) < 16$   
 $4x + 8 < 16$   
 $\frac{4x}{4} < \frac{8}{4}$   
 $x < 2$   
 $x < 2$

10.  $2(k-1) > 5 + 3k$   
 $2k - 2 > 5 + 3k$   
 $-3k + 2 > 2 - 3k$   
 $\frac{-k}{-1} > \frac{7}{-1}$   $k < -7$   
 $k < -7$

**Part A**

Answers	
1)	$x \geq -3$
2)	$x > \frac{4}{7}$
3)	$z \leq -3$
4)	$p < 120$
5)	$y < -2$
6)	$z \leq -2$
7)	$x < 2$
8)	$x \geq 7$
9)	$x < 4$
10)	$k < -7$
Bonus Answer: $2 < x \leq 4$	
Bonus Graph: 	