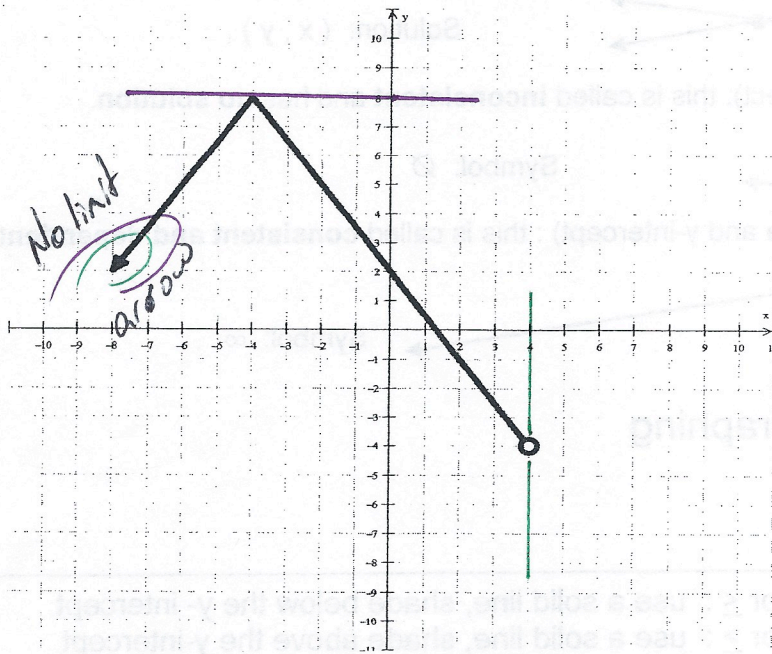


Answer the following problems and turn in to me

1. Describe the domain and range of the following graph:



Range  $(-\infty, 8]$

Domain  $(-\infty, 4)$

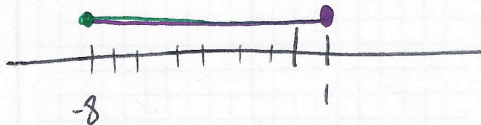
Solve the following equations.

2.  $2|6x+3| - 25 = 5$   
 $2|6x+3| = 30$   
 $|6x+3| = 15$   
 $6x+3 = 15$   
 $6x = 12$   
 $x = 2$  (yes)  
 $6x+3 = -15$   
 $6x = -18$   
 $x = -3$  (No extraneous)

3.  $|3x+1| = 4x-14$   
 $3x+1 = 4x-14$   
 $-4x-1 = -4x-1$   
 $-x = -15$   
 $x = 15$  (No extraneous)  
 $3x+1 = -4x+14$   
 $+4x-1 = +4x-1$   
 $7x = 13$   
 $x = \frac{13}{7}$  (No extraneous)

Solve and Graph the inequalities.

4.  $|2x+7| \leq 9$   
 $2x+7 \leq 9$   
 $-7 \quad -7$   
 $2x \leq 2$   
 $x \leq 1$   
 $2x+7 \geq -9$   
 $-7 \quad -7$   
 $2x \geq -16$   
 $x \geq -8$



5.  $|4x-7| > 17$   
 $4x-7 > 17$   
 $+7 \quad +7$   
 $4x > 24$   
 $x > 6$   
 $4x-7 < -17$   
 $+7 \quad +7$   
 $4x < -10$   
 $x < -\frac{10}{4}$   
 $x < -\frac{5}{2}$   
 $-2\frac{1}{2}$

