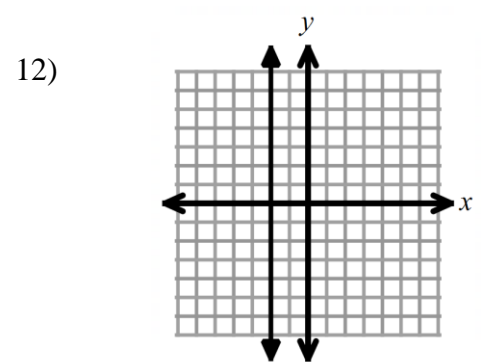
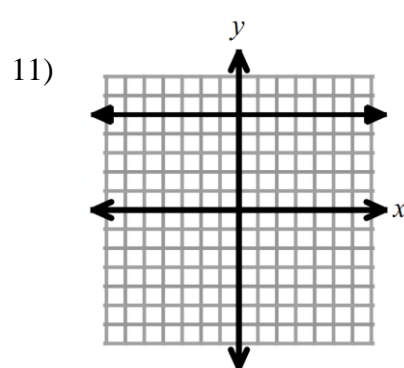
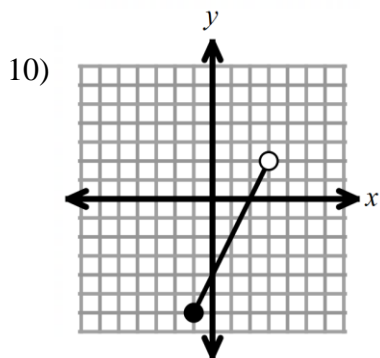
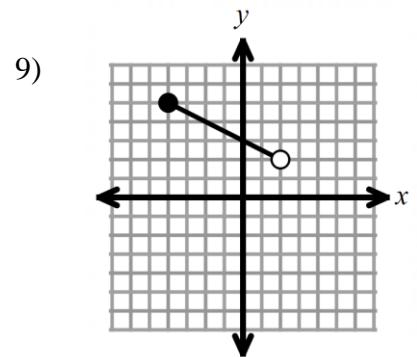
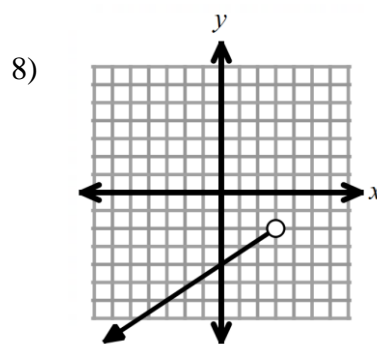
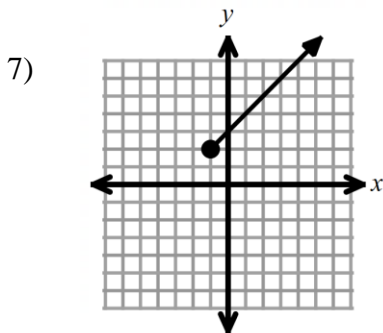
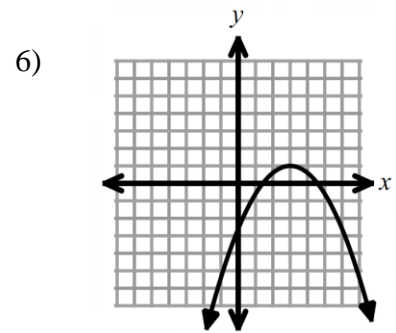
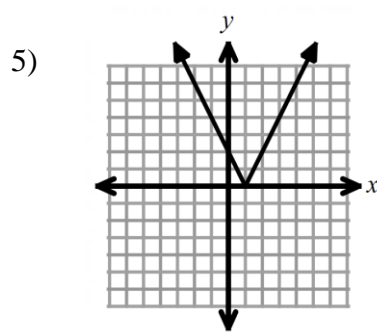
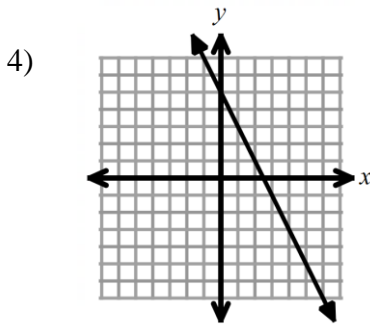
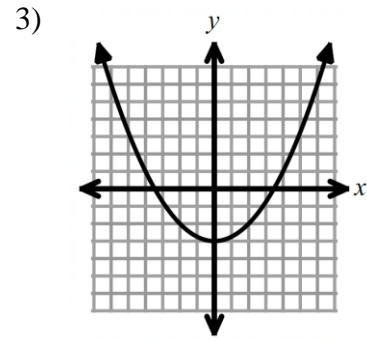
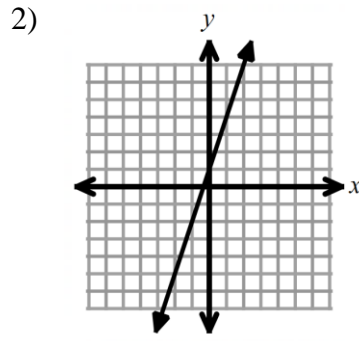
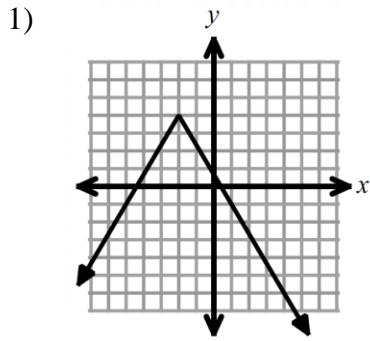


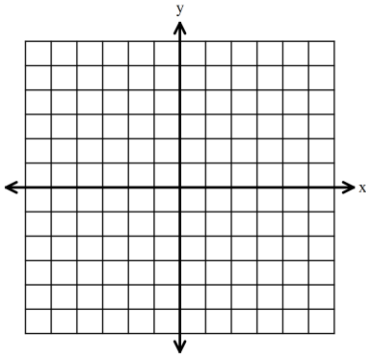
For #1 – 12, find the domain and range of each function or relation.





1) Graph:  $y = \frac{1}{3}|x - 2| - 6$

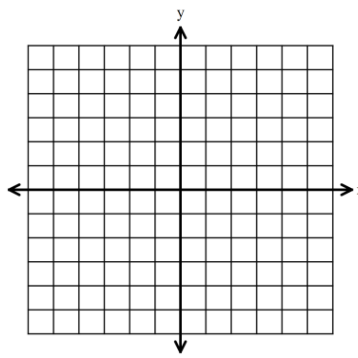
2) from #1



Vertex:  
Domain:  
Range:

3) Graph:  $y = -|x| + 3$

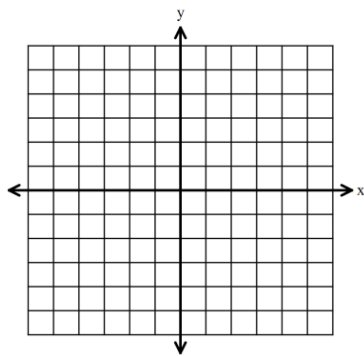
4) from #3



Vertex:  
Domain:  
Range:

5) Graph:  $y = 2|x + 4| + 1$

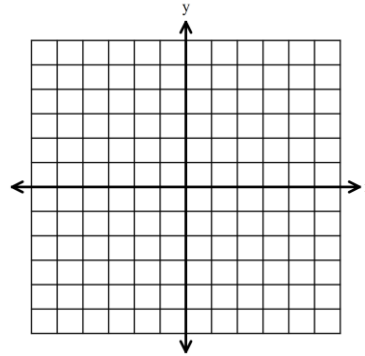
6) from #5



Vertex:  
Domain:  
Range:

7) Graph:  $y = -3|x - 5|$

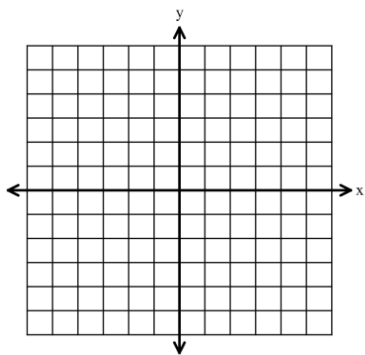
8) from #7



Vertex:  
Domain:  
Range:

9) Graph:  $y = |x + 3| - 6$

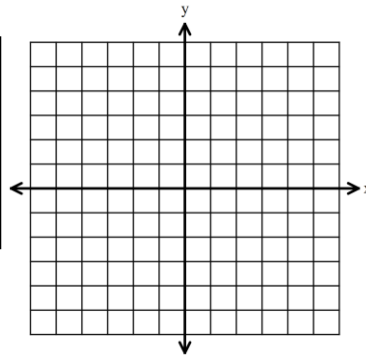
10) from #9



Vertex:  
Domain:  
Range:

11) Graph:  $y = -\frac{2}{3}|x| + 5$

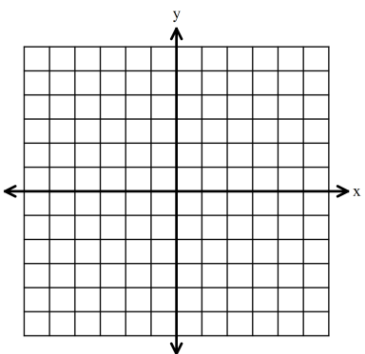
12) from #11



Vertex:  
Domain:  
Range:

13) Graph:  $y = -2|x - 3| - 1$

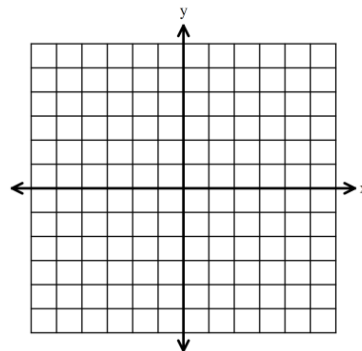
14) from #13



Transformations  
from  $y = |x|$ :

15) Graph:  $y = \frac{1}{3}|x + 2| - 4$

16) from #15



Transformations  
from  $y = |x|$ :

## 5.2 Reflection

A) What level of frustration did you experience while doing this assignment?

0

1

2

3

4

No frustration

A small amount of frustration

Frustrated half the time

Frustrated most the time

Frustrated all of the time

B) Use the scale below to determine how confident you are on each topic in the table below.

0

1

2

3

4

Not confident

Slightly confident

Confident half the time

Confident most the time

Confident all of the time

Portion	Confidence Scale Value
Graphing an absolute value function	
Finding the coordinates of the vertex	
Writing the domain	
Writing the range	
Writing the transformations	

C) Are you proud of your effort on this assignment? Why or why not?

D) List a goal for your next assignment.

**For #1 – 12:** Solve for  $x$  in each equation below, if possible.

1)  $|x| = 5$

2)  $|2x - 4| = 8$

3)  $5|x - 3| = 60$

4)  $-3|x| + 8 = -7$

7)  $-5|x| + 4 = -6$

8)  $\frac{1}{4}|x - 5| = 11$

9)  $-\frac{1}{5}|x| + 3 = -4$

10)  $-4|x - 3| + 1 = 9$

11)  $3|x| + 16 = 7$

12)  $2|6x - 5| - 6 = 8$

## 5.3 Reflection

A) **How much do you agree with this statement?** I showed persistence on this assignment, because I tried the problems that were hard for me, and I gave my best effort even when it was challenging.

- 1) strongly disagree      2) disagree      3) agree      4) strongly agree

B) **How much do you agree with this statement?** When I felt frustrated on this assignment, I was able to calm myself down and then focus on trying the problems.

- 1) strongly disagree      2) disagree      3) agree      4) strongly agree

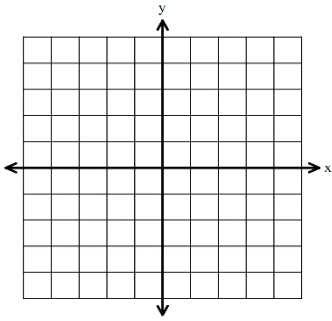
C) **How much do you agree with this statement?** When I needed help on this assignment, I used **appropriate** resources (such as my notes, watching a video, getting help from others) to try to understand the material.

- 1) strongly disagree      2) disagree      3) agree      4) strongly agree

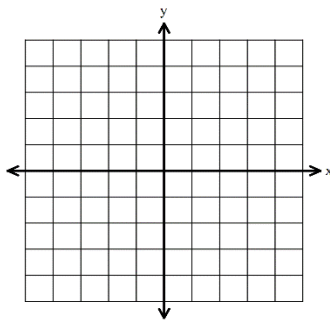
D) Are you proud of your effort on this assignment? Why or why not?

For #1 – 10: Graph each linear inequality.

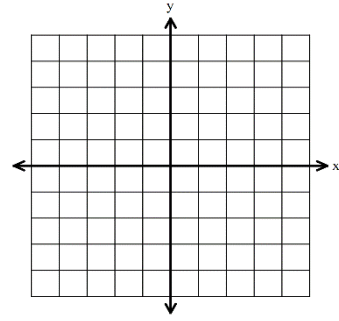
1)  $y > -\frac{2}{5}x + 3$



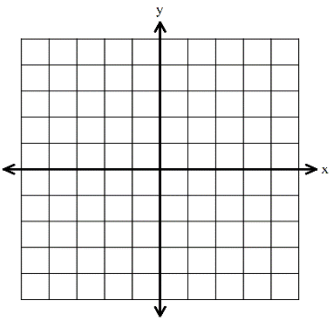
2)  $y \leq 2x - 1$



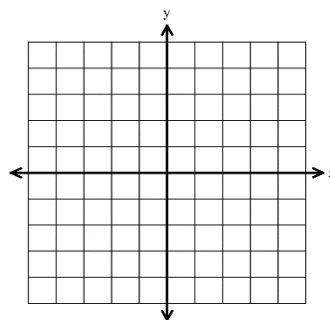
3)  $y \geq \frac{1}{3}x - 4$



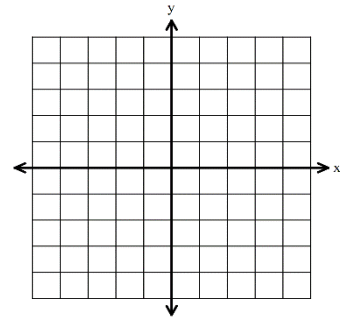
4)  $y < \frac{1}{4}x - 3$



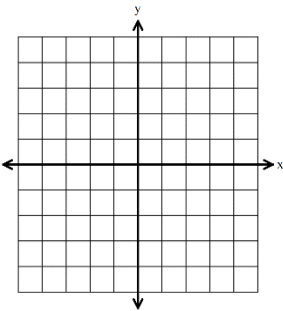
5)  $y > 4x - 3$



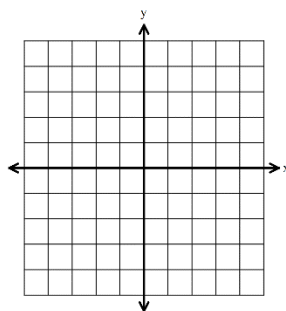
6)  $y \leq \frac{1}{5}x$



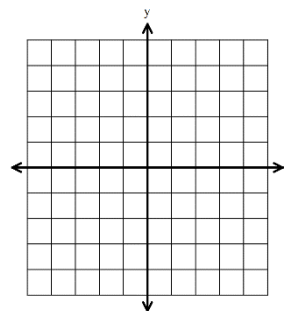
7)  $x > 3$



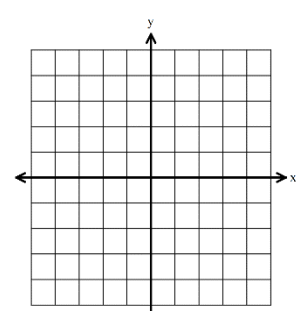
8)  $y < -1$



9)  $x \geq -4$



10)  $y \leq 3$



For #11 – 14: Write the explicit formula for each arithmetic sequence below.

11) 15, 13, 11, 9, 7, ...

12) -1, 7, 15, 23, 31, ...

13) 30, 20, 10, 0, -10

14) 5, 6, 7, 8, 9, ...

## 5.4 Reflection

**Part A)** How well are you understanding Ch 5? Consider each topic, and then measure your understanding between 0 (not understanding at all) and 5 (am able to help other students on this topic.)

Topic	Ranking (0 to 5)
Finding domain and range	
Graphing absolute value functions	
Solving absolute value equations	
Graphing linear inequalities	
Writing explicit formulas for arithmetic sequences	

**Part B)** Evaluate your *effort* on the 5.4 lesson. Include your effort and focus during notes, as well as during the HW time. Share your thoughts below.

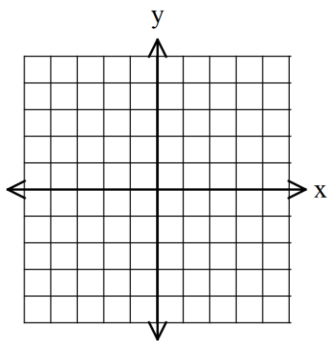
**Part C)** What is your goal for your semester grade in this class?



For # 1 – 4, sketch each function and identify the requested information.

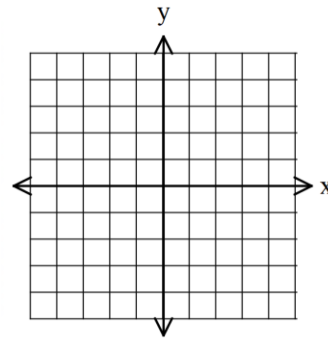
1)  $y = -\frac{1}{3}|x + 1| + 4$

Vertex:  
Domain:  
Range:



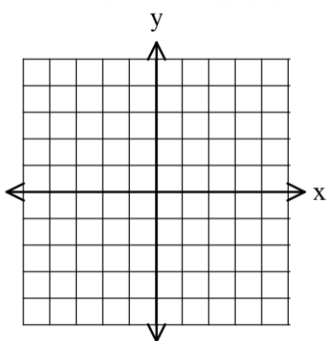
2)  $y = \frac{2}{3}|x - 2|$

Vertex:  
Domain:  
Range:



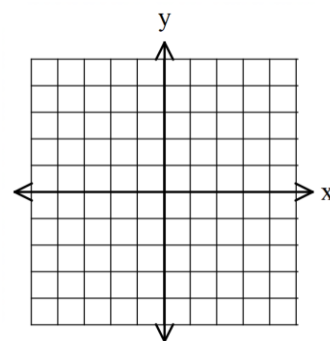
3)  $y = \frac{1}{2}|x| - 3$

Vertex:  
Domain:  
Range:



4)  $y = -3|x - 2| + 5$

Vertex:  
Domain:  
Range:



For #5 – 6: Write the transformations from the parent function  $y = |x|$  for the given function.

5) The graph from #3.

6) The graph from #4.

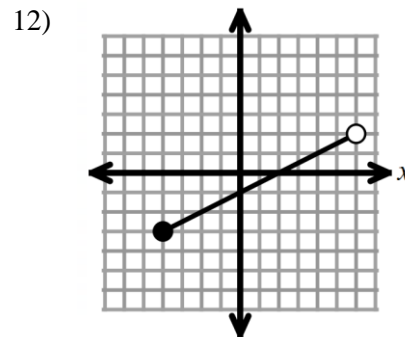
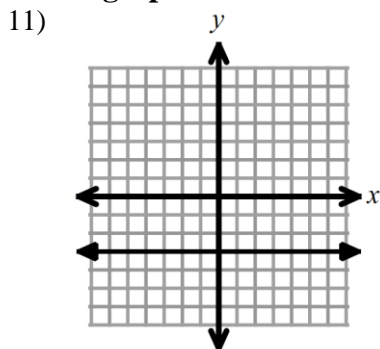
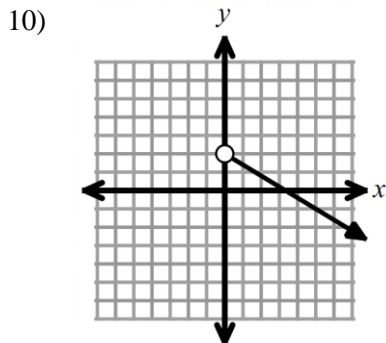
For #7 – 9, write the explicit form for each arithmetic sequence.

7) 24, 19, 14, 9, ...

8) 7, 11, 15, 19, ...

9) -7, -5, -3, -1, 1, ...

For #10 – 12, write the domain and range for the graph shown.



## Ch 5 Review Worksheet, continued...

For #13 – 16, solve for the variable.

13)  $|x| + 4 = 18$

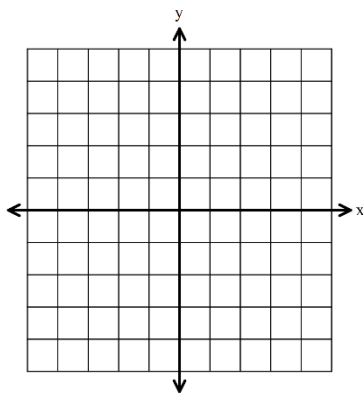
14)  $2|x + 5| - 1 = 25$

15)  $-1 = -2|x - 3| + 9$

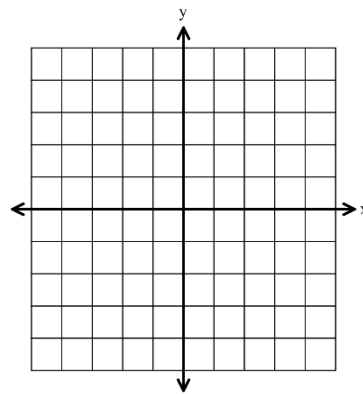
16)  $-5|3 - 8x| = 20$

For #14 – 17: Graph each linear inequality.

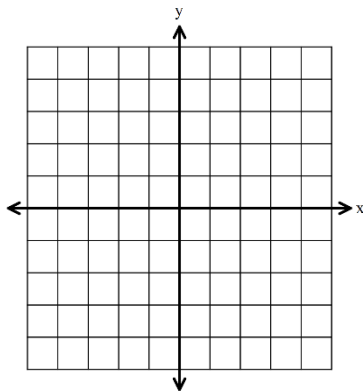
14)  $y \geq -\frac{2}{3}x + 4$



15)  $y < 3x - 2$



16)  $y > -2$



17)  $x \leq -1$

