

Name _____

Day	Date	Assignment (Due the next class meeting)
Tuesday Monday	11/22/22 11/28/22	5.1 Worksheet
Tuesday Wednesday	11/29/22 11/30/22	5.2 Worksheet
Thursday Friday	12/01/22 12/02/22	5.3 Worksheet
Monday Tuesday	12/05/22 12/06/22	5.4 Worksheet
Wednesday Thursday	12/07/22 12/08/22	Ch 5 Review Wk
Friday Monday	12/09/22 12/12/22	Ch 5 Big Quiz HW: Sem 1 Rev Wk #1
Tuesday Wednesday	12/13/22 12/14/22	Sem Rev Wk #2
Thursday Friday	12/15/22 12/16/22	Practice Final
Monday	12/19/22	C day: STUDY!
Tuesday Wednesday Thursday	12/20/22 12/21/22 12/22/22	Final Exams

NOTE: Be prepared for daily quizzes.

- HW is due the next class meeting.
- Late HW is reduced by 50% of the score.
- Students with 100% homework completion and no missing homework for the semester will get a 2% grade increase.
- Students with 100% homework completion AND no late/missing homework for the semester will be rewarded with a pizza party.
- See www.washoeschools.net/DRHSmath if you need handouts for this class.

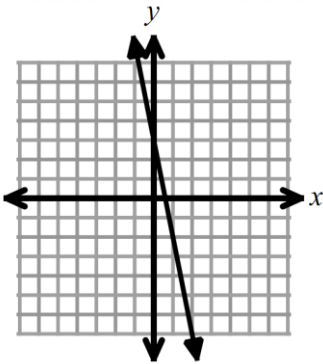
5.1 Notes: More Domain and Range

Key Terms

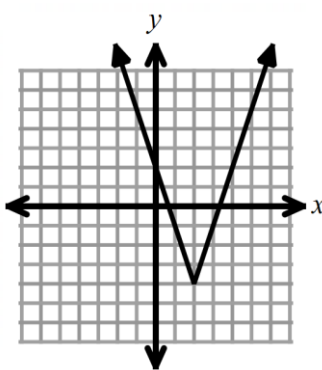
Domain	Range

For #1 – 6, find the domain and range of each function.

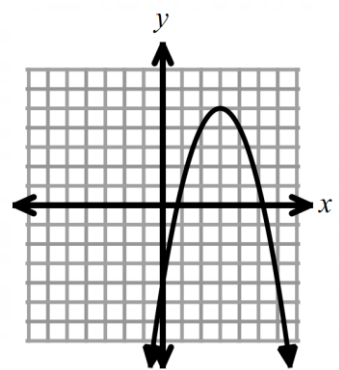
1)



2)

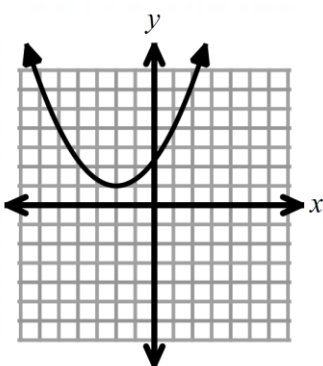


3)

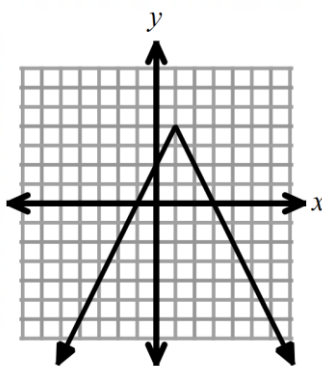


You try #4 – 6!

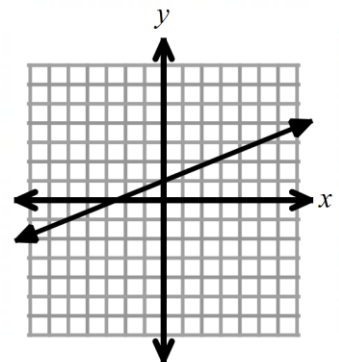
4)



5)

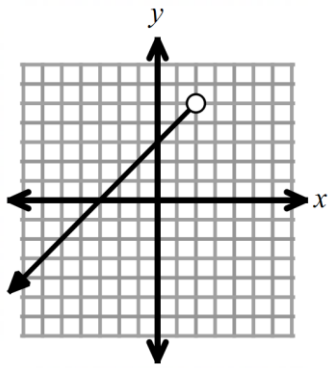


6)

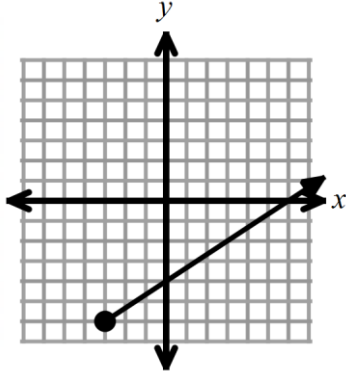


For #7 – 15, find the domain and range of each function.

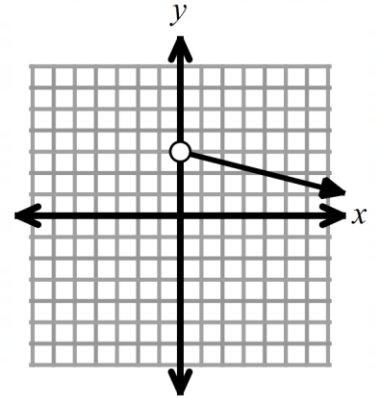
7)



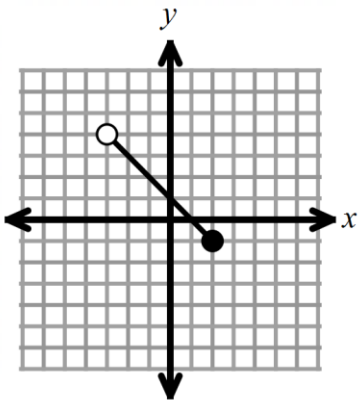
8)



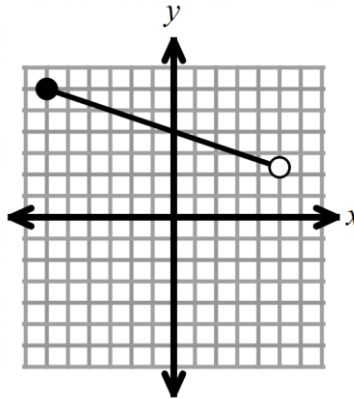
9) **You try!**



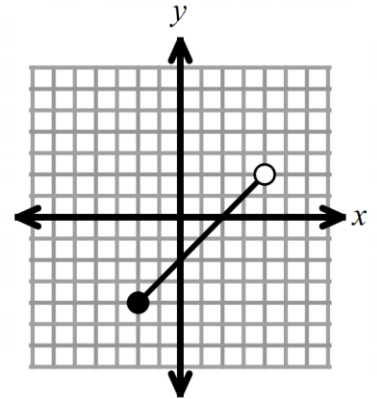
10)



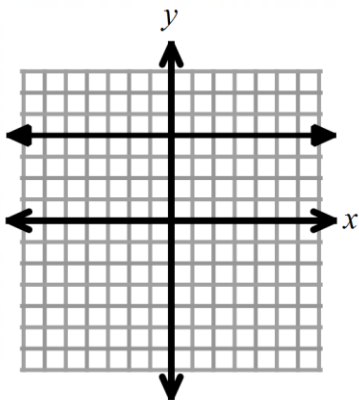
11)



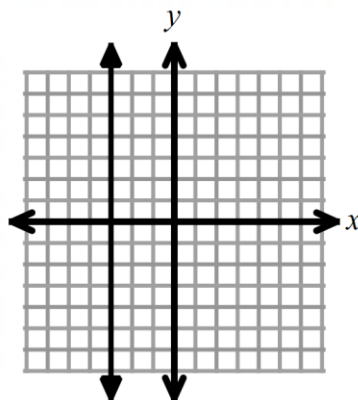
12) **You try!**



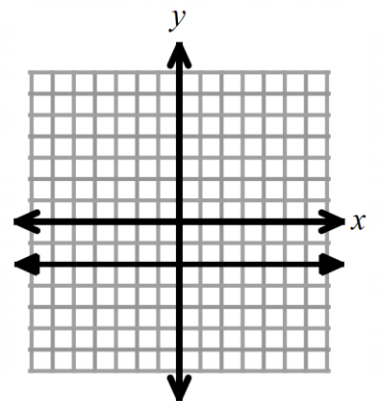
13)



14) Not a function...



15) **You try!**



5.2 Notes: Graphing Absolute Value Functions

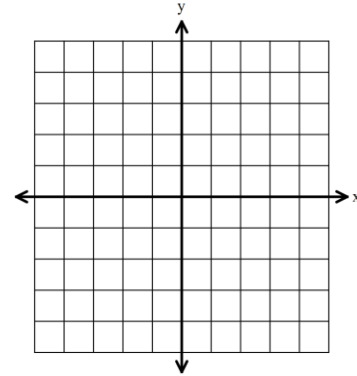
Objectives:

- Students will be able to graph absolute value functions.
- Students will be able to identify domain, range, and vertex of absolute value functions.

Example 1: Use a table of values to graph the functions $y = |x|$.

a) $y = |x|$

x	$y = x $



Domain:

Range:

Vertex:

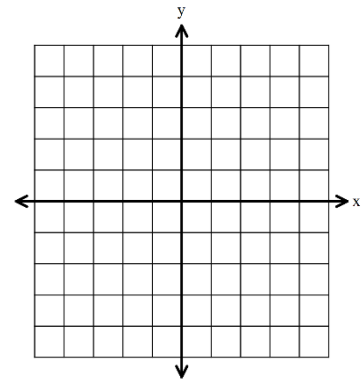
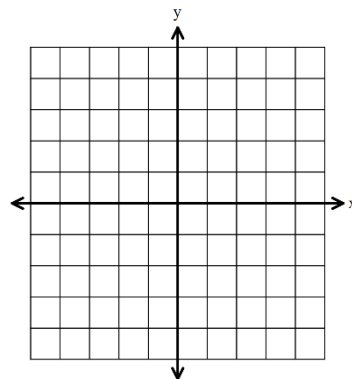
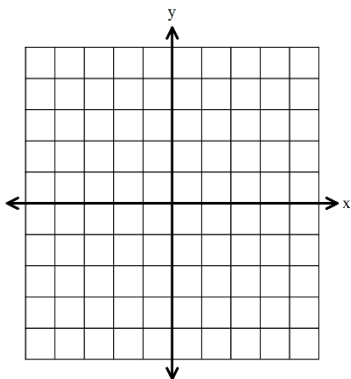
(h, k) Form of an Absolute Value Function: $y = m|x - h| + k$

For Examples #2 – 4: Graph each absolute value function. Name the vertex, domain, and range.

2) $y = 3|x + 1| - 2$

3) $y = \frac{2}{3}|x| - 4$

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



Vertex:
Domain:
Range:

Vertex:
Domain:
Range:

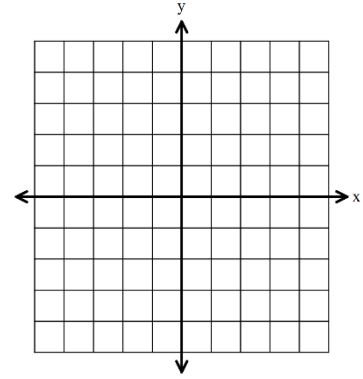
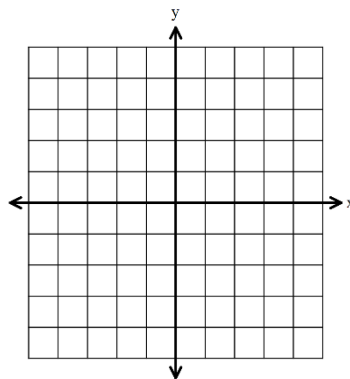
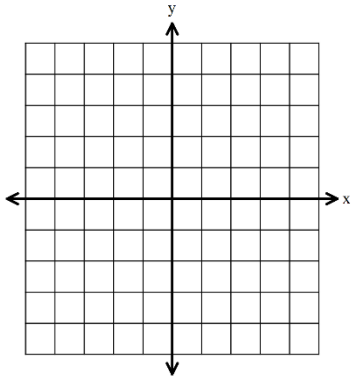
Vertex:
Domain:
Range:

You try! Graph each absolute value function. Name the vertex, domain, and range.

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

6) $y = \frac{1}{3}|x + 5|$

7) $y = -3|x| - 2$



Vertex:
Domain:
Range:

Vertex:
Domain:
Range:

Vertex:
Domain:
Range:

A **parent function** is the most basic form of a family of functions. The parent function for Absolute Value functions is :

Transformations from the parent function:

Shifts

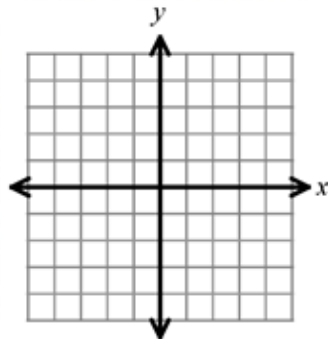
Reflection

Stretch

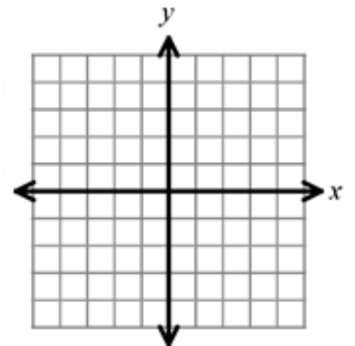
Compression

For # 8 – 9: Graph each function. Describe the transformations form the parent function $y = |x|$

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



9) $y = -\frac{2}{5}|x + 1| + 4$



5.3 Notes: Solving Absolute Value Equations

Objective: Students will be able to solve absolute value equations algebraically.

Absolute Value:

Solving Absolute Value Equations:

Examples #1 – 6: Solve for x in each equation below.

1) $|x| = 6$

2) $|4x - 3| = 6$

3) $|x| - 3 = 6$

You try! Solve for x in each equation below.

4) $|x| = 10$

5) $|x| + 4 = 11$

6) $|3x + 1| = 16$

Examples 7 – 8: Solve for x in each equation below.

7) $10|x| - 14 = 6$

8) $-\frac{1}{3}|x + 2| = -6$

You try! For #9 – 10: Solve for x in each equation below.

9) $\frac{1}{5}|x| - 4 = 2$

10) $-5|x - 3| + 1 = -9$

Absolute Value Equations with No Solution

Examples 11 – 14: Solve for x , if possible.

11) $-2|x - 4| + 16 = 20$

12) $-5|-3x + 1| + 6 = -14$

5.4 Notes: Extra Topics

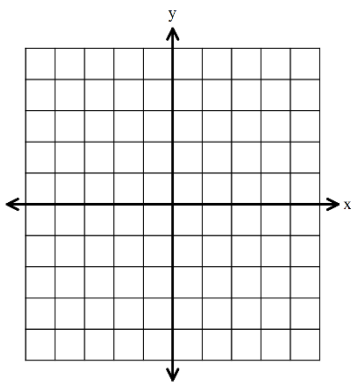
Objectives:

- Students will be able graph linear inequalities
- Students will be able to write explicit forms for arithmetic sequences

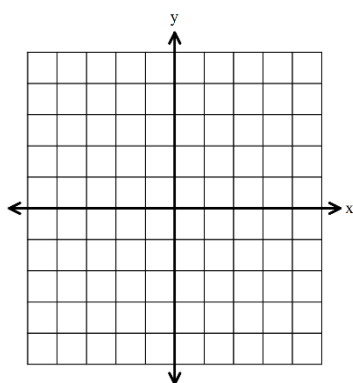
Graphing Linear Inequalities

For #1 – 6: Graph each linear inequality.

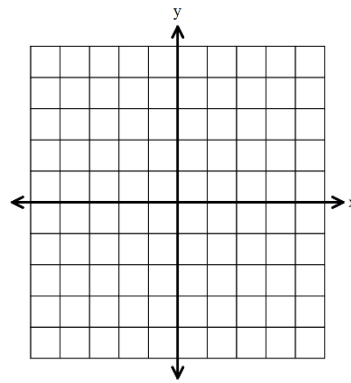
1) $y < \frac{1}{3}x - 2$



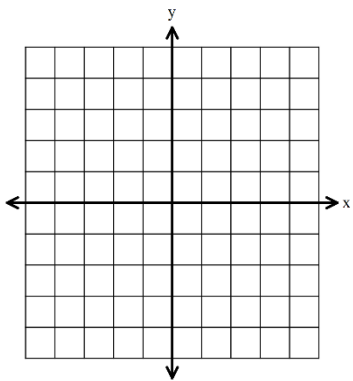
2) $y \geq -\frac{5}{3}x + 4$



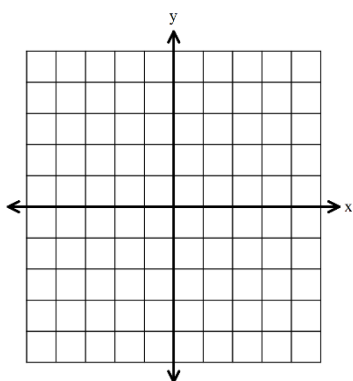
3) $y > 3x - 5$

**You try!**

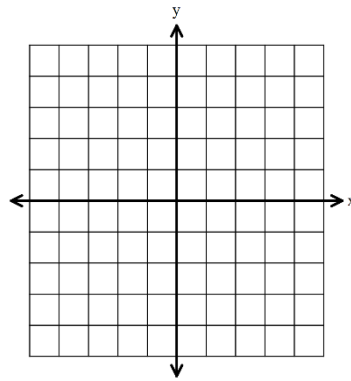
4) $y \leq \frac{5}{4}x - 3$



5) $y > -2x + 1$



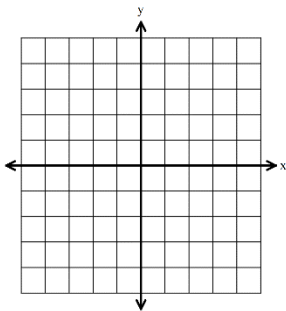
6) $y < 4x$



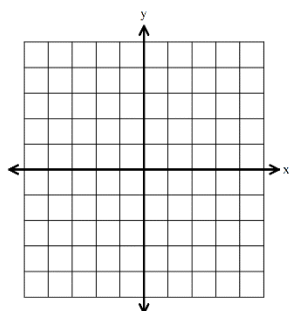
For #7 – 10: Graph each linear inequality.

You try #9 – 10!

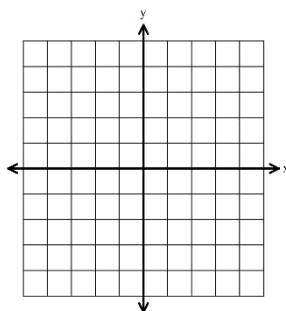
7) $y > 2$



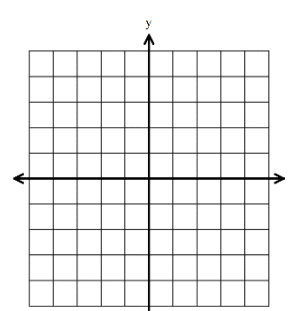
8) $x \leq 3$



9) $x > -4$



10) $y \geq -1$



Arithmetic Sequence

Explicit Formula for an Arithmetic Sequence: $a_n = dn + a_0$

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

11) -5, -2, 1, 4, 7, ...

12) 11, 6, 1, -4, -9, ...

13) 2, 13, 24, 35, ...

14) -6, -10, -14, -18, ...