Name: _____   Date: _____   Period: _____
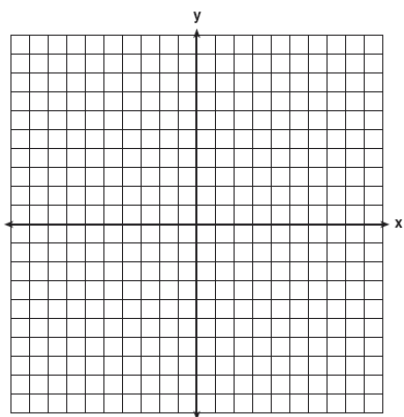
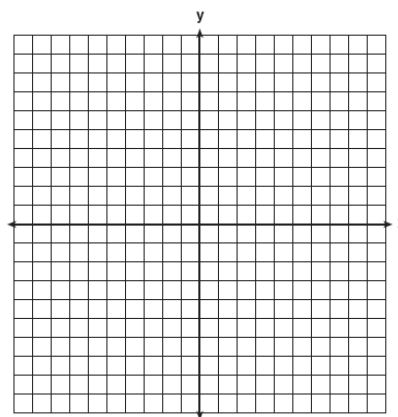1. Graph the following equation:
$$g(x) = 3|x|$$

D:

R:
* set notation

2. Graph the following equation:
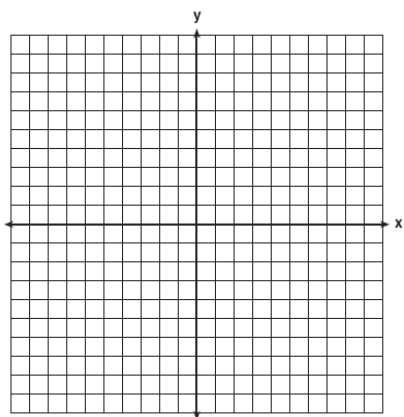$$g(x) = -2.5|x|$$

D:

R:
* set notation

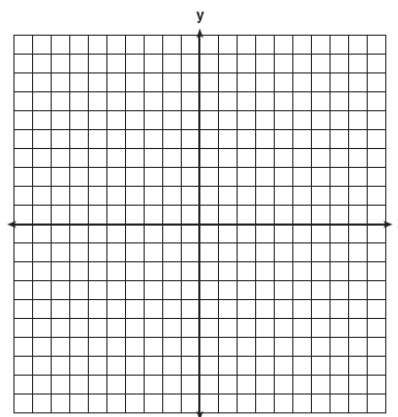3. Graph the following equation:
$$g(x) = \frac{1}{2}|x|$$

D:

R:
* set notation

4. Graph the following equation:
$$g(x) = -\frac{2}{3}|x|$$

D:

R:
* set notation

Use Interval Notation to write the Domain and Range of each function.

5. $g(x) = |x| + 4$

D: _____

R: _____

6. $g(x) = -|x + 5|$

D: _____

R: _____

7. $g(x) = |x| - 8$

D: _____

R: _____

8. $g(x) = |x - 3| + 7$

D: _____

R: _____

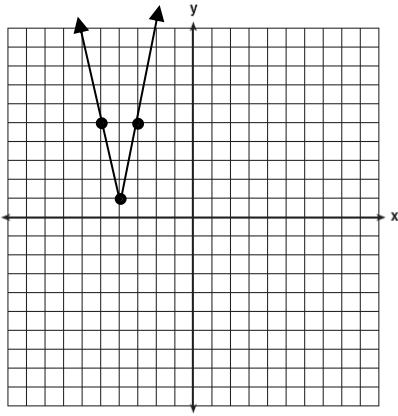9. $g(x) = -|x + 9| - 4$

D: _____
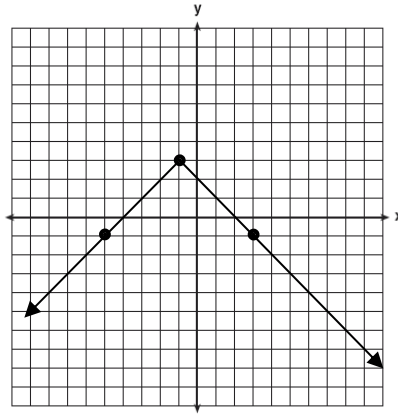
R: _____

10. $g(x) = |x - 6|$
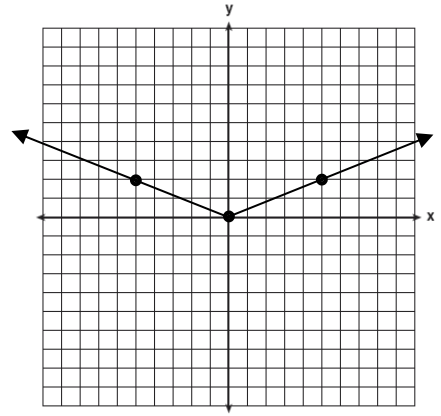
D: _____

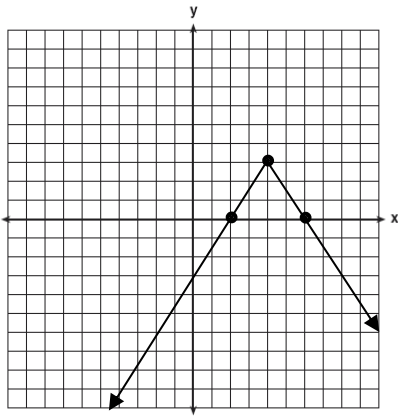R: _____

11. Write the equation of the graph:
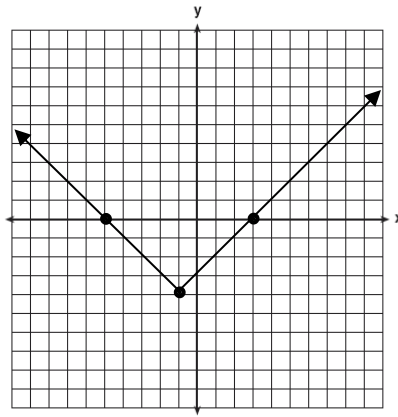
12. Write the equation of the graph:

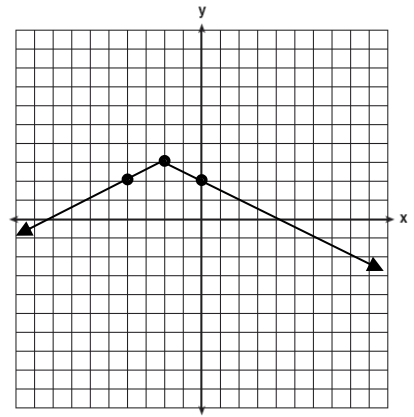13. Write the equation of the graph:

14. Write the equation of the graph:

15. Write the equation of the graph:

16. Write the equation of the graph:

_____

_____

_____

If you were asked to tell the story of the following absolute value functions, how would it go?

17. $y = -3|x + 2| - 5$

Tell the story:

18. $y = \frac{2}{3}|x - 1| + 7$

Tell the story:

19. $y = 2|x| - 2$

Tell the story:

20. $y = -|x + 8| + 4$

Tell the story: