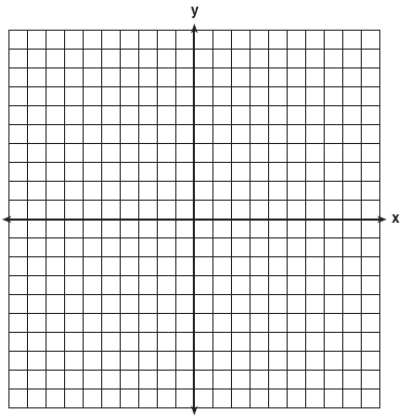
Name: Date: Period:

1. Graph the following equation:

$y = 2|x| - 4$



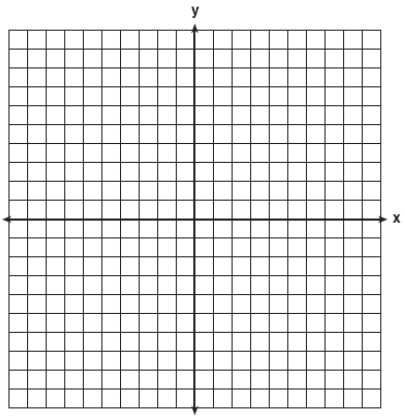
D:

R:

*Set Notation

2. Graph the following equation:

$y = -3|x - 3| + 5$



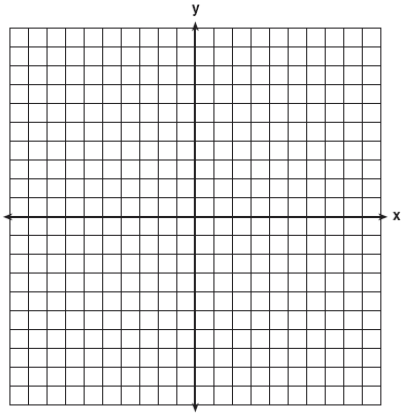
D:

R:

*Set Notation

3. Graph the following equation:

$y = 1.5|x - 2| - 3$



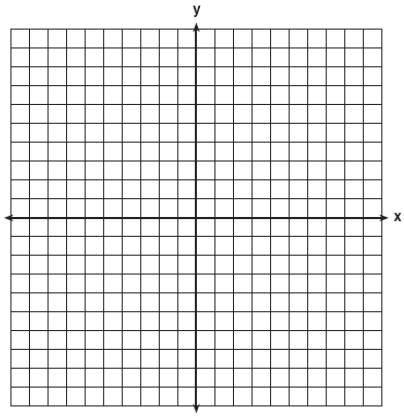
D:

R:

*Set Notation

4. Graph the following equation:

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



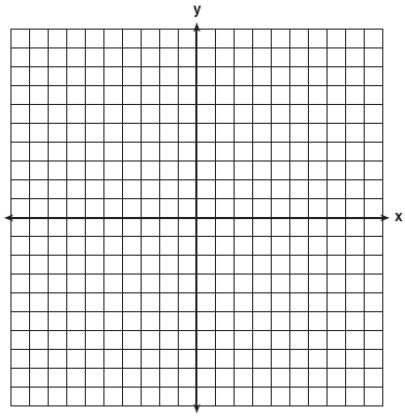
D:

R:

*Set Notation

5. Graph the following equation:

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



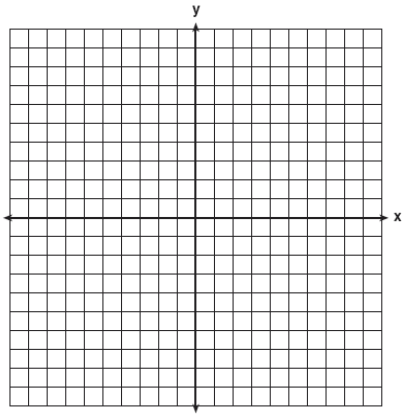
D:

R:

*Set Notation

6. Graph the following equation:

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



D:

R:

*Set Notation

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

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

D: _____

R: _____

8. $g(x) = |x - 2|$

D: _____

R: _____

9. $g(x) = |x + 3| - 1$

D: _____

R: _____

10. $g(x) = |x + 2| + 2$

D: _____

R: _____

12. $g(x) = |x| + 1$

D: _____

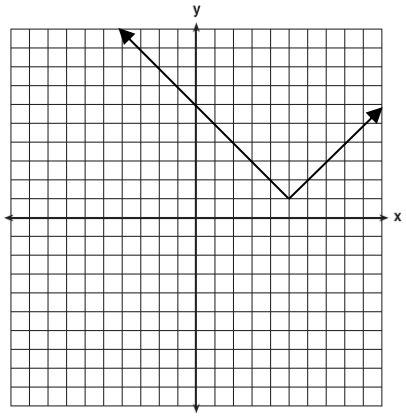
R: _____

13. $g(x) = |x - 9| + 6$

D: _____

R: _____

14. Write the equation of the graph:



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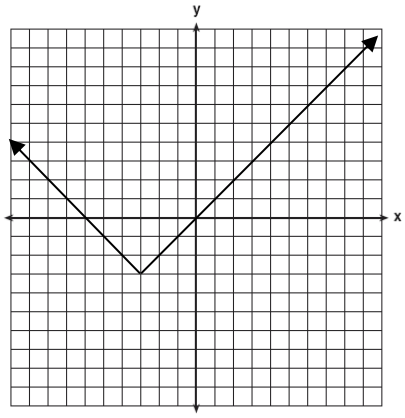
15. Write the equation of the graph:



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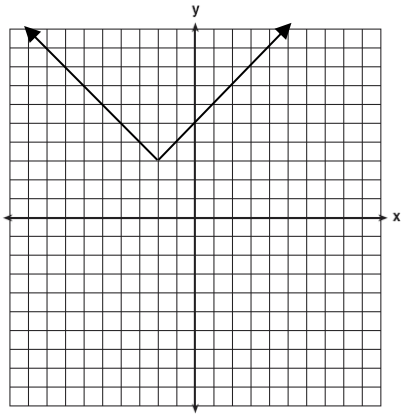
16. Write the equation of the graph:



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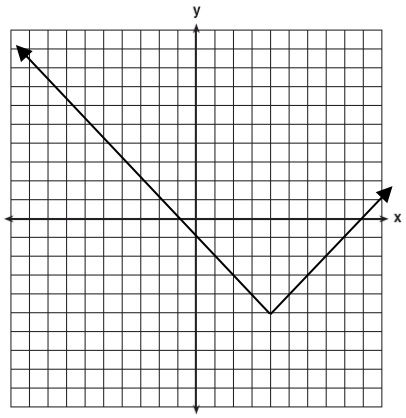
17. Write the equation of the graph:



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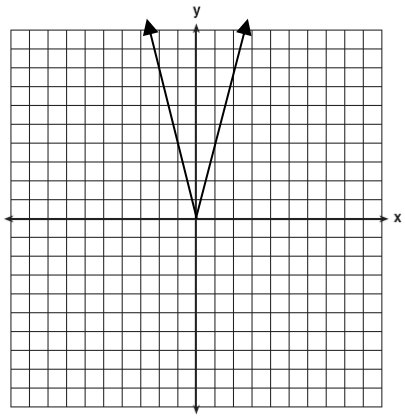
18. Write the equation of the graph:



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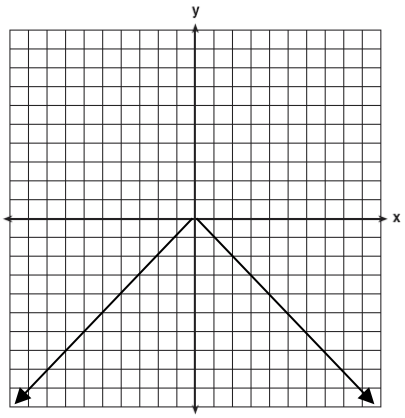
19. Write the equation of the graph:



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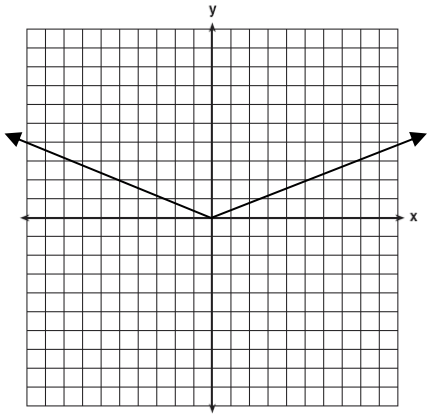
20. Write the equation of the graph:



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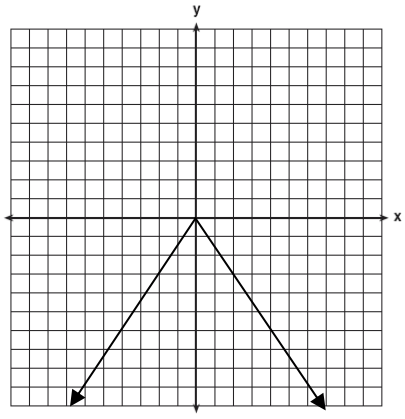
21. Write the equation of the graph:



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22. A student says that the graph of $g(x) = |x + 3| - 1$ is the graph of the parent function, $f(x) = |x|$, translated 3 units to the right and 1 unit down. Explain what is incorrect about this statement.