

Name: _____ Period: _____

Score:

_____/_____
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HW 3-7: Linear vs. Non-Linear

Show whether each set of tables represents a linear relationship by finding several slopes. For each linear relationship write an equation in slope-intercept form.

1.

X	Y
-1	-5
0	-2
4	10
10	28

2.

X	Y
-2	0
-1	1
0	3
1	6

3.

X	Y
4	2
9	3
16	4
25	5

4.

X	Y
-2	-10
-1	-5
0	0
3	15

5.

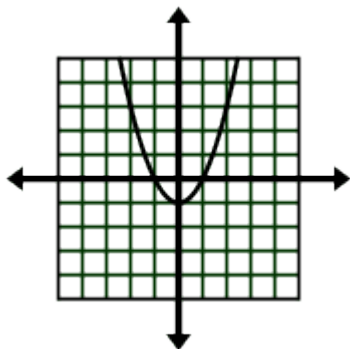
X	Y
1	1
2	8
3	27
4	64

6.

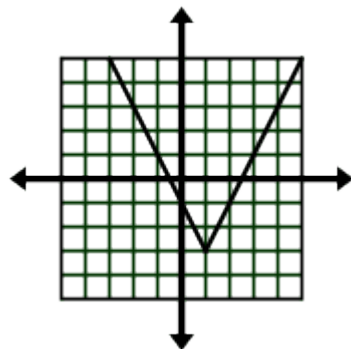
X	Y
-4	12
-3	10
-2	8
-1	6

Problems 7-12: Determine whether the following graphs and equations are linear or not linear.

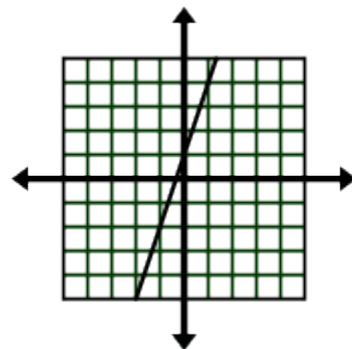
7.



8.



9.



10. $y = |3x - 5| + 1$

11. $-2(x - 4) + 1 = y$

12. $y = (x^2 + 4) - x$

Tell whether each equation is linear or non-linear.

13. $y = 2x + 5$

18. $y = |2x + 1|$

14. $y = x^3 + 1$

19. $y = \frac{x^2}{2}$

15. $y = \frac{x}{3} - 2$

20. $y = 4$

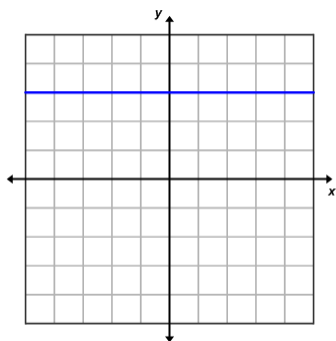
16. $y = 0.4x - 4$

21. $y = |x| + 10$

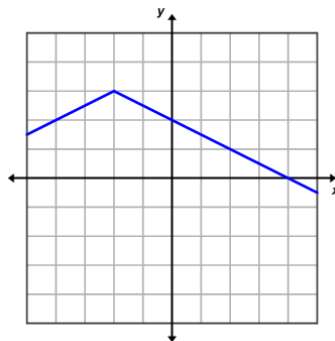
17. $y = x$

Tell whether each graph is linear or non-linear. If it is linear, find the slope.

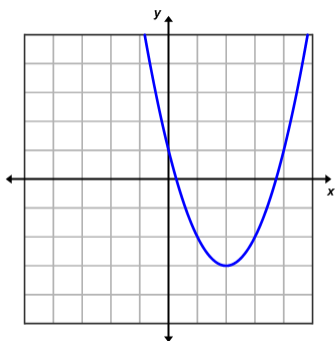
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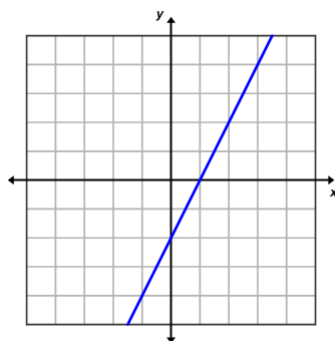
23.



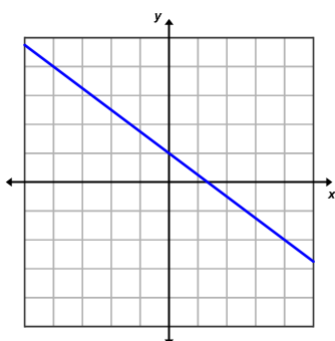
24.



25.



26.



27.

