

**Just by looking at the table**, make a prediction on the appearance of the graph (in comparison to  $y = x$ ) of the following. (Is the graph translated above or below the graph of  $y = x$ ? Does it have a positive or negative correlation? Is the graph steeper or more shallow than the graph of  $y = x$ ?)

1. (This is the parent function.)

x	y
0	0
1	1
2	2
3	3
4	4

Rate \_\_\_\_\_ y-intercept \_\_\_\_\_

2.

x	y
0	-4
1	-3
2	-2
3	-1
4	0

Rate \_\_\_\_\_ y-intercept \_\_\_\_\_

Prediction:

3.

x	y
-2	5
-1	7
0	9
1	11
2	13

Rate \_\_\_\_\_ y-intercept \_\_\_\_\_

Prediction:

4.

x	y
1	0
2	-3
3	-6
4	-9
5	-12

Rate \_\_\_\_\_ y-intercept \_\_\_\_\_

Prediction:

5.

x	y
1	-1
2	-5
3	-9
4	-13
5	-17

Rate \_\_\_\_\_ y-intercept \_\_\_\_\_

Prediction:

6.

x	y
2	-5
3	-2
4	1
5	4
6	7

Rate \_\_\_\_\_ y-intercept \_\_\_\_\_

Prediction:

Slope - Day 3  
Assignment

Name \_\_\_\_\_  
Date \_\_\_\_\_ Period \_\_\_\_\_

7. Describe the change that occurs when the graph of  $y = x + 2$  is translated to  $y = x - 5$ .
  
8. Describe the change that occurs when the graph of  $y = x$  is transformed to  $y = 5x$ .
  
9. Describe the change that occurs when the graph of  $y = x$  is transformed to  $y = \frac{1}{6}x$ .
  
10. Describe the change that occurs when the graph of  $y = 2x + 3$  is transformed to  $y = -\frac{1}{2}x + 3$ .
  
11. Where do the graphs of  $y = 3x$  and  $y = 3x + 4$  intersect the  $y$ -axis and what is the relationship between the two lines?
  
12. Give an example of two lines that are parallel and cross the  $y$ -axis 6 units apart.
  
13. Give an example of two lines who cross the  $y$ -axis at the same location, but one is steeper than the other.