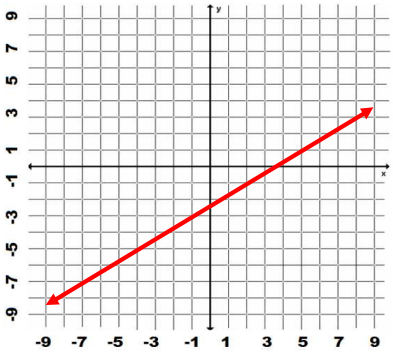
MasterMath

Name _____

Direct Variation and Function Notation

Date _____

1. **Does this line represent a Direct Variation? Explain your answer.**



No. A direct Variation has a y-Intercept of 0. This line has a y-Intercept of -2.

2. **Is the relationship between x and y a Direct Variation?**

x	-2	-1	0	1	2	3	4	5
y	-3	-1.5	0	1.5	3	4.5	6	7.5

yes

3. **Create an equation in Function form for the relationship between x and y described in the table from Question 2.**

***f*(x) = 1.5x**

4. **What is the Constant of Variation for this relationship: 4x + y = 0**

-4

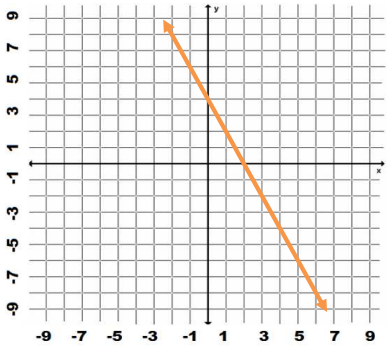
5. **A line passes through the point (0, 3). Can you determine whether the line represents a Direct Variation? How?**

All Direct Variations go through the Origin, and one point is always (0, 0). Since this is a straight line, there can only be one y value for an x value of zero, so the line does not include (0, 0), and is not a Direct Variation.

6. **Evaluate this function for x = 2.5:** ***f*(x) = 3x - 1.5**

***f*(2.5) = 6**

7. **Graph the function *f*(x) = 4 - 2x**



8. **What is the Constant of Variation for the function f(x) = 4x**

4

9. **Is this a Direct Variation?**

x	y
0	1
3	7
6	13

no