

# MasterMath

## Comparing Linear and Non-Linear Functions

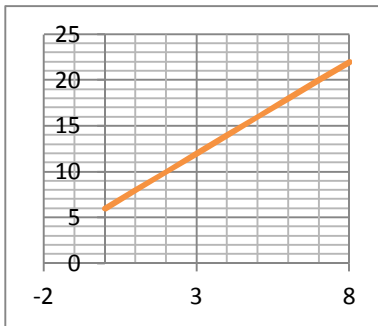
Name \_\_\_\_\_

Date \_\_\_\_\_

### 1. Are these functions linear or non-linear

Function	Re-written	Linear or Non-Linear
$x + y = 6$		
$3y = 9x - 12$		
$xy = 16$		
$y^2 = x + 4$		
$x = 3y + 2$		
$y^2 = x^2$		
$y^2 = x^3$		

2. Does this graph represent a linear function? What is the equation of the function?




3. Describe three ways to determine if a function is linear.


4. Does this table represent a linear function?

x	y
0	6
1	8
2	10
3	12
4	14
5	16

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5. You have a job as a grocery clerk that pays you \$7.25 per hour. Assuming you get paid for partial hours, write an equation that will calculate how much you earn for any number of hours worked. Is this a linear relationship?

equation	
linear?	