May 13/14 MSA Linear Relationships Name _____

Table 1	
X	Y
0	0
1	1.5
2	3
3	4.5
4	6

Table 2	
X	Y
0	0
1	4
2	6
3	12
4	13

Table 3	
X	Y
0	20
1	15
2	10
3	5
4	0

Rate of Change: _____ | Rate of Change: _____ | Rate of Change: _____

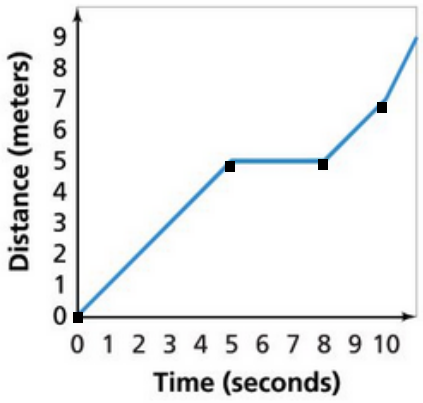
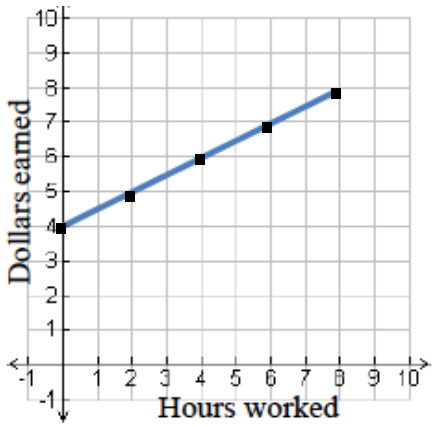
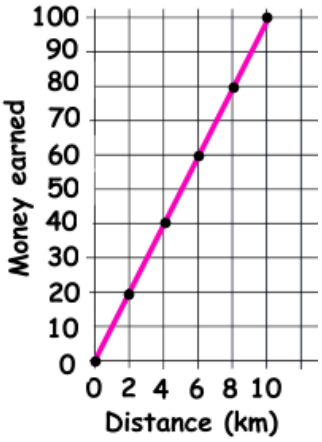
Which table(s) represents a linear relationship? Explain.

Write an **equation** for **one** of the linear tables: _____

Which table(s), if any, represents a proportional relationship? Explain.

Equation 1	**Equation 2**	**Equation 3**
$y = 4x$	$y = -3x + 10$	$y = 3x^2$
Rate of Change: _____	Rate of Change: _____	Rate of Change: _____

Which equation(s) represents a linear relationship? Explain.

Graph 1	Graph 2	Graph 3
		
Rate of Change: _____	Rate of Change: _____	Rate of Change: _____

Which graph(s) represents a **linear** relationship? Explain.

Which graph(s), if any, represents a **proportional** relationship? Explain.

CHALLENGE:

Does the following table show a linear relationship? Explain. If it does, write the equation.

x	*y*
0	-6
3	0
6	12
9	18

Does the following table show a linear relationship? Explain. If it does, write the equation.

x	*y*
-1	-6
0	0
2	12
5	30