Lines: Lesson 10
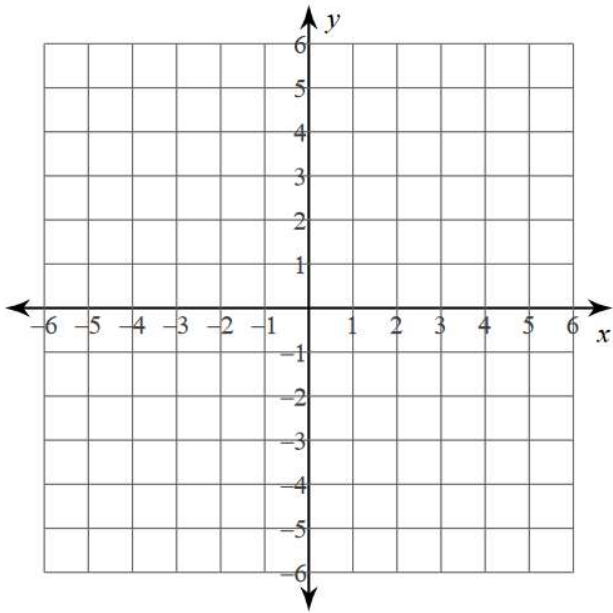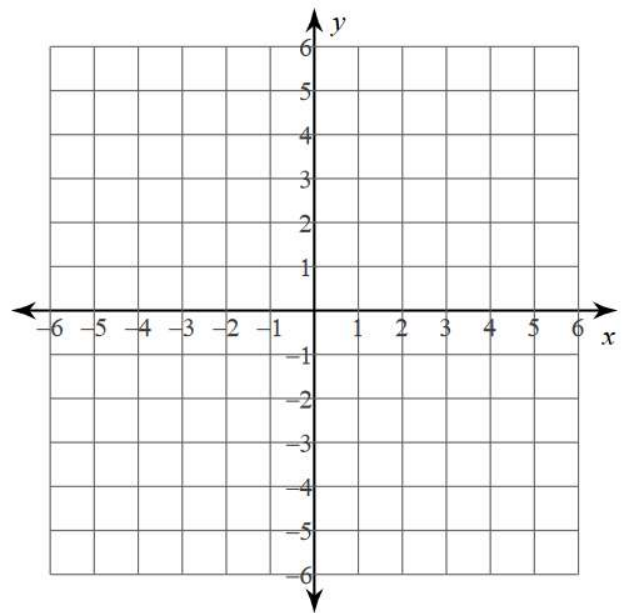# Direct Variation: Notes

Name: _____

MATH ALL

Direct Variation

NOT Direct Variation

y-intercept = _____

$y =$ _____ · _____

The amount you get paid varies directly with the number of hours you work:

_____ = _____ · _____

Your distance traveled varies directly to the number of hours driven:

_____ = _____ · _____

Our weight on the moon varies directly to our weight on earth:

_____ = 0.165 · _____

$y=kx \longrightarrow k = \underline{\qquad}$

Are these data sets examples of direct variation?

x	y
2	1
3	6
4	8

x	y
-6	9
1	-1.5
8	-12

If y varies directly with x, and when $x=6$, $y=2$, what is y when $x=24$?

1. Write the direct variation equation: _____
2. Put in the numbers that are related: _____
3. Solve for k:
4. Put our k into the original formula: _____
5. Put the new number in, and then solve for the other:

The number of candies produced on a machine varies directly with the number of hours the machine is running. When the machine runs for 5 hours, there are 750 candies. How many candies are there when the machine runs for 8 hours?