Algebra 1 Name _____

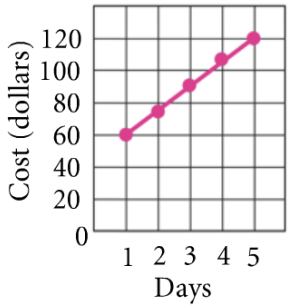
2-0 Slopes & Rates of Change Date _____ **A#1-2**

Goal: To find the rate of change from a graph. To find slope.

Rate of Change	Slope
…allows you to see the _____ between two quantities that are _____ $= \frac{\text{change in the } \square \text{ variable}}{\text{change in the } \square \text{ variable}}$	Slope is

Describe the situation in each graph. Then find the rate of change.

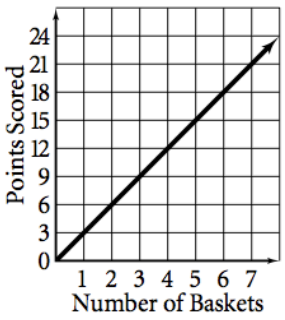
Example 1



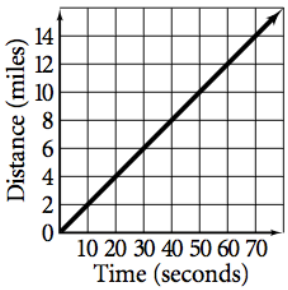
Description & Rate of Change

Practice

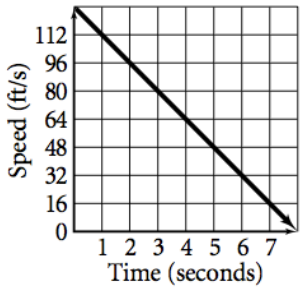
4.



5.



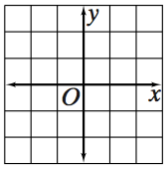
6.



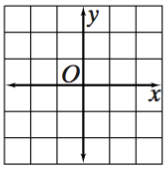
Algebra 1

2-0 Slopes & Rates of Change **A#1-2**

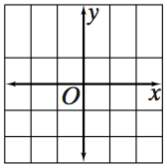
Slopes of Lines



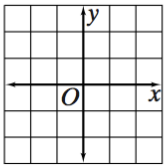
A line with _____ slope slants upward from left to right.



A line with _____ slope slants downward from left to right.



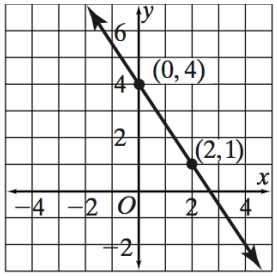
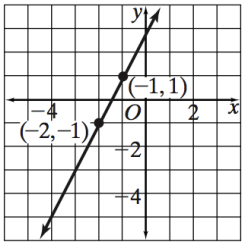
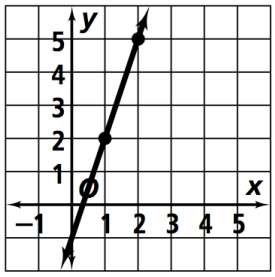
A line with a slope of 0 is _____.



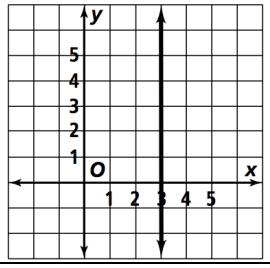
A line with an undefined slope is _____.

Roller Coaster:

Find the slope of the line using the graph and the two points.

Example 2 	Count the rise over run…	Substitute into the formula…
Example 3 		
Practice A 		

Practice B	Count the rise over run…	Substitute into the formula…



Find the slope of the line that passes through each pair of points.

Example 4 $(-2, 5), (3, -4)$	
Example 5 $(2, 4), (6, 4)$	

Practice

Find the slope of the line that passes through each pair of points.

13. $(-3, -2), (4, -2)$ **14.** $(4, -2), (4, 9)$ **15.** $(5, 2), (5, -4)$

Through the given point, draw the line with the given slope.

16. $P(3, -2)$
slope 3

17. $K(0, 4)$
slope -1

18. $M(-2, 3)$
slope $-\frac{5}{3}$