

Slope as a Rate of Change – Practice

1. Determine the y -values and the rate of change in the y -values for each equation.

a) $y = -2x + 2$

x	y	Rate of Change
-2		
-1		
0		
1		
2		

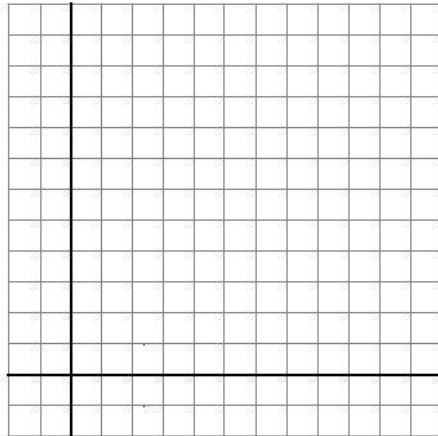
b) $y = 5x - 1$

x	y	Rate of Change
-2		
-1		
0		
1		
2		

2. Karl works at a local grocery store, where he earns \$8.25/h. A typical shift lasts 6 h.

- a) Complete the table of values to show his total earnings for up to 6 hours of work.
 b) Determine the rate of change in his total earnings.
 c) Graph your table of values and connect the points with a straight line.

Hours Worked	Total Earnings (\$)	Rate of Change
0		
1		
2		
3		
4		
5		
6		



- d) Choose any two points on the line and find the rise and run between them.

rise = _____ **run** = _____

- e) Find the slope of the line.

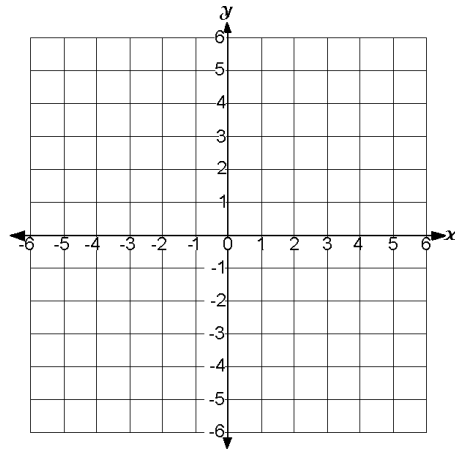
$$\text{slope}(m) = \frac{\text{rise}}{\text{run}}$$

=

- f) What does the rate of change **represent** in **THIS** problem?

3. The equation of a straight line is $y = 2x + 2$
- Create a table of values for this equation. Use x values from -3 to 2
 - Graph your table of values and draw a straight line through the points.

x	y



- Choose any two points on the line and find the rise and run between them.
rise = _____ **run** = _____

- Find the slope of the line.

$$\text{slope}(m) = \frac{\text{rise}}{\text{run}}$$

=

- What is the rate of change of this line? _____

4. Janice works on an assembly line packing dolls into boxes to sell in stores. Janice can pack 15 dolls in 1 hour.

- Complete the table of values to show how many dolls Janice packs in 6 hours of work.
- Find the rate of change in the number of dolls that Janice packs.
- What does the rate of change **represent** in **THIS** problem?

Hours Worked	Total # of Dolls Packed	Rate of Change
0		
1		
2		
3		
4		
5		
6		