Name: _____   Date: _____   Period: _____

Assignment 12: Slope from Two Points and Tables

Directions: Find the slope of the line that passes through each pair of points. Simplify all answers, and leave answers as fractions not decimals if needed.
There is a graph at the bottom of the page if you need it.

The Slope Formula: $m = \dfrac{y_2 - y_1}{x_2 - x_1}$

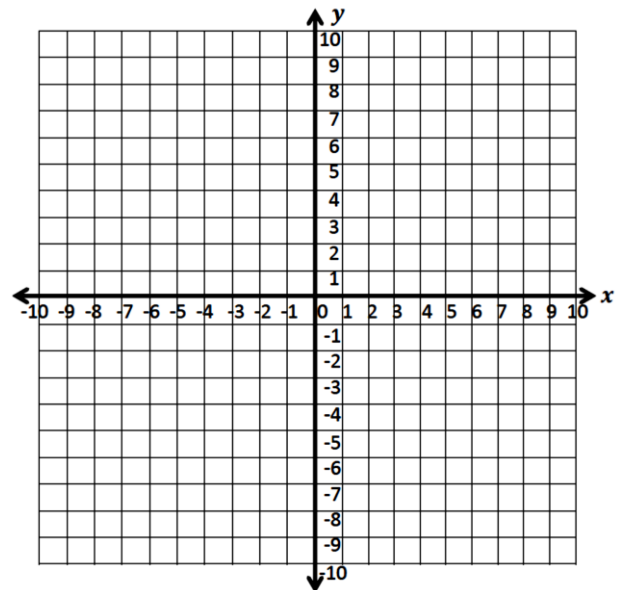|		
1. $(4, 3)$ and $(8, 6)$ Slope:	2. $(1, 3)$ and $(7, 5)$ Rate of Change:	3. $(-1, -2)$ and $(2, 7)$ $\dfrac{change\ in\ y}{change\ in\ x}$:
4. $(3, -2)$ and $(5, -2)$ $m =$	5. $(2, -3)$ and $(0, -2)$ Slope:	6. $(-5, 2)$ and $(1, -2)$ $\dfrac{rise}{run}$:
7. $(0, 4)$ and $(4, 0)$ Rate of Change:	8. $(9, -5)$ and $(9, 1)$ $m =$	9. $(4, 10)$ and $(-2, -5)$ Slope:

10. Find the slope of the line that passes through the following points: $(2, 1)$, $(-1, -5)$, and $(3, 3)$

11. The slope of the line that passes through the points $(-2, y)$ and $(-5, 7)$ is $-\dfrac{2}{3}$. What is the value of y?

12. The slope of the line that passes through the points $(-10, y)$ and $(5, 2)$ is $\frac{2}{5}$.
What is the value of y?

A. 0   B. 4   C. -4 D. -2

Directions for 13-18: **Find the rate of change of the line represented by each table.**

13.

X	Y
-2	-3
-1	-1
0	1
1	3
2	5

Rate of Change:

14.

X	Y
-4	6
0	4
4	2
8	0
12	-2

$\frac{change\ in\ y}{change\ in\ x}$:

15.

X	Y
6	2
3	2
0	2
-3	2
-6	2

Slope:

16.

X	Y
-2	-3
0	3
2	9
6	21
10	33

m:

17.

X	Y
3	6
3	4
3	2
3	0
3	-2

Slope:

18.

X	Y
-4	4
-1	3
2	2
5	1
8	0

$\frac{rise}{run}$:

19. Which table shows the same rate of change of y with respect to x as $y = -1 + 4x$?

A

x	y
-3	-12
-1	-4
2	8
5	20

C

x	y
-4	6.5
2	2.75
4	1.5
8	-1

B

x	y
-4	10.4
2	0.8
4	-2.4
8	-8.8

D

x	y
-3	12
-1	4
2	-8
5	-20

Answer Bank

-1 0 2 3 $-\frac{2}{3}$ $\frac{1}{3}$ $-\frac{1}{2}$ $\frac{3}{4}$ $\frac{5}{2}$ 0 5

$undefined$ A C 2 3 $-\frac{1}{3}$ $-\frac{1}{2}$ $undefined$