

Finding Slope from Tables
Homework

Name: _____
Date: _____ Period: _____

Determine the **slope** of the line in each **table** by finding the ratio: **y-interval change to x-interval change**. Then, describe the slope of the graph as **positive, negative, vertical, or horizontal**.

1. $m = 2$
Description: positive

x	y
-2	3
-1	5
0	7
1	9
2	11

Handwritten notes: Arrows pointing to the x and y columns with '+2' written next to them.

2. $m = 4$
Description: positive

x	y
1	-17
2	-13
3	-9
4	-5
5	-1

Handwritten notes: Arrows pointing to the x and y columns with '+4' written next to them.

3. $m = 2.5$
Description: positive

x	y
0	3
1	5.5
2	8
3	10.5
4	13

Handwritten notes: Arrows pointing to the x and y columns with '2.5' written next to them.

4. $m = -5$
Description: negative

x	y
-6	-4
-5	-9
-4	-14
-3	-19
-2	-24

Handwritten notes: Arrows pointing to the x and y columns with '-5' written next to them.

5. $m = 0$
Description: horizontal

x	y
-4	6
-2	6
0	6
2	6
3	6

Handwritten notes: Arrows pointing to the x and y columns with '0' written next to them.

6. $m = \text{undefined}$
Description: vertical

x	y
5	2
5	4
5	6
5	8
5	10

Handwritten notes: Arrows pointing to the x and y columns with '2' written next to them.

7. Find the rate of change. $m = 5$ Graph Description: positive

	1	2	3	4	5
Number of Lunches	1	2	3	4	5
Total Costs (dollars)	5	10	15	20	25

Handwritten notes: 'x' and 'y' written to the left of the table. An arrow points to the x-axis with '5' written below it.

8. Find the rate of change. $m = -1$ Graph Description: negative

$-\frac{3}{2} = -1$

	7	9	11	14	16
Time in seconds	7	9	11	14	16
Altitude in meters	4	2	0	-3	-5

Handwritten notes: An arrow points to the x-axis with '2' written above it. Another arrow points to the y-axis with '-3/2' written next to it.

9. Karen's parents were keeping a record of her growth from ages 12 through 16. She was 60 inches when she was 12 and they found she was growing an inch per year. Make a table showing Karen's growth for these Years.

Age (yrs)	12	13	14	15	16
Height (in)	60	61	62	63	64

a) What is the independent variable? Age (years)

b) What is the dependent variable? Height (inches)

c) Using the table, find the slope of the line.

$$m = 1$$

1 inch per year

} rate of change is slope

d) What would be a reasonable domain for this situation?

$$TR \geq 12$$

$$12 \leq x \leq 16$$

e) What would be a reasonable range for this situation?

$$TR \geq 60$$

$$60 \leq y \leq 64$$