

Name: \_\_\_\_\_

Key

Date: \_\_\_\_\_

Period: \_\_\_\_\_

**Module 2 - Topic 2 Quiz Review**

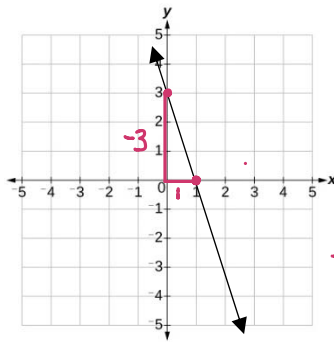
1. Find the slope of the line represented in the table.

x	y
5	2
10	4
20	8
35	14
40	16

Slope =  $\frac{2}{5}$

$$\frac{y}{x} = \frac{4-2}{10-5} = \frac{2}{5}$$

2. Find the slope of the line shown in the graph.



Slope =  $-3$

$$\frac{\text{Rise}}{\text{Run}} = \frac{-3}{1} = -3$$

3. Determine if the points in the following tables will make a straight line or not and explain how you know.

x	y
1	5
2	10
3	15

Yes/No  $\frac{y}{x} = \frac{5}{1} = \frac{5}{1}$

The table has  
a constant rate  
of change of 5.  
SAME SLOPE: 5

x	y
1	4
3	8
6	16

Yes/No

There is no  
constant rate  
of change. The  
slope is different  
between points.

$$\frac{y}{x} = \frac{8}{3} = \frac{4}{1.5} = \frac{4}{2}$$

x	y
2	3
4	5
10	11

Yes/No  $\frac{y}{x} = \frac{6}{6} = \frac{2}{2}$

The table has  
a constant rate  
of change of 1.  
SAME SLOPE: 1

4. What is the slope of the line that contains the points (4, 7) and (10, 9)?

$$x_1 y_1 \quad x_2 y_2$$

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

$$m = \frac{9-7}{10-4} = \frac{2}{6} = \frac{1}{3}$$

Slope =  $\frac{1}{3}$

9-13: Use the following information to answer the following questions.

- Chris is throwing a Super Bowl party. He wants to have the party catered by either Rattler's or Stone Fire.
- Rattler's charges \$40 for catering and \$4 for each person that attends.
- Stone Fire charges \$12 for each person who attends.

5. What is the equation that shows the Cost (C) of having Rattler's cater for (p) people?

- A.  $p = 4C + 40$       B.  $C = 4p + 40$       C.  $p = 40C + 4$       D.  $C = 40p + 4$

6. What is the equation that shows the Cost (C) of having Stone Fire cater for (p) people?

- A.  $p = 12$       B.  $p = 12C$       C.  $C = 12$       D.  $C = 12p$

7. Complete the table for **Rattler's** comparing the number of people (p) who attend to Cost (C).

People (p)	Cost (C)
0	40
1	44
2	48
3	52
4	56
5	60

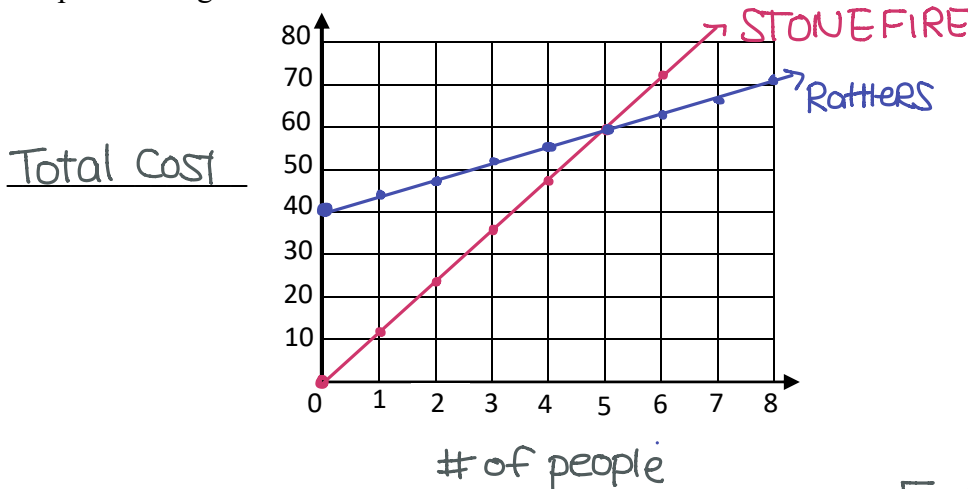
Rattler's

8. Complete the table for **Stone Fire** comparing number of people (p) who attend to Cost (C).

People (p)	Cost (C)
0	0
1	12
2	24
3	36
4	48
5	60

Stone Fire

9. Plot the points using the information above for Rattler's and Stone Fire. **Make sure you label each line.**



10. How many people need to attend the party for the cost to be the same? 5 people

11. What will the cost be when it is the same? \$60

12. Give an example of a number of people for when would it be cheaper to go to Rattler's? more than 5

13. Give an example of a number of people for when it would be cheaper to go to Stone Fire? less than 5