

# Linear Relationships

Name: KEY

Mary goes to the office supply store and bought 3 dozen binder clips for \$2.88.

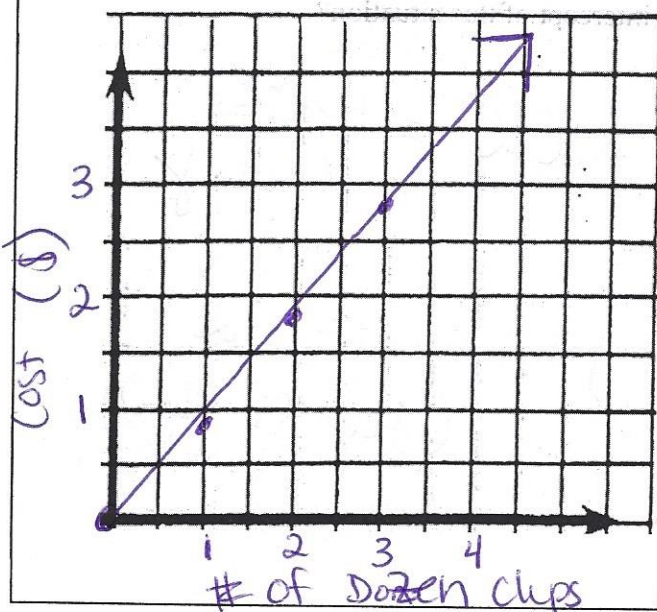
1. Create a table for this situation.

X (# of dozen)	Y (cost in \$)
0	0
1	0.96
2	1.92
3	2.88

2. Write an equation for this situation.

$$y = 0.96x$$

3. Graph the data. Include labels for each axis.



4. What is the rate of change or slope and y-intercept of this situation?

$$\text{R.O.C.} = \frac{\$0.96}{1 \text{ dozen}}$$

$$y\text{-intercept} = 0$$

(buying 0 dozen clips costs \$0)

Is this relationship proportional or non-proportional? Explain how you know.

Proportional because there is no y-intercept; no flat fee

To use Wi-Fi at a hotel, there is a one-time connection fee of \$12 and then a daily rate of \$2.50 per day.

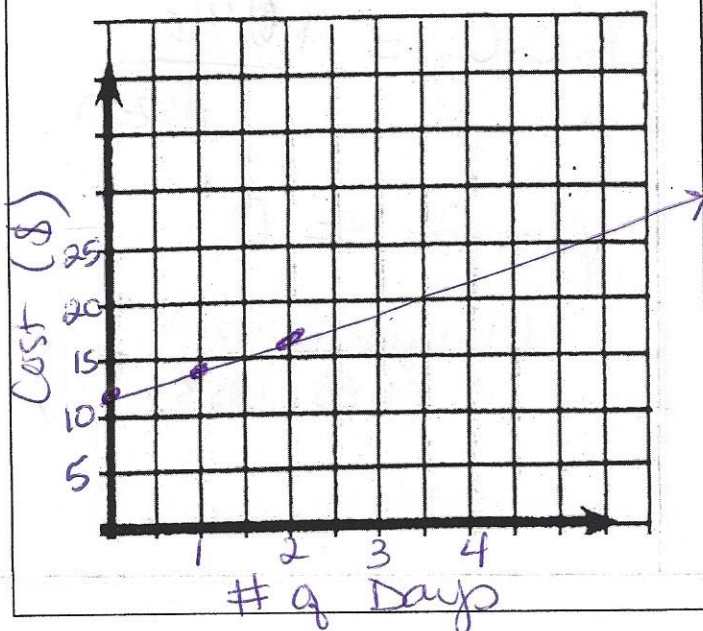
1. Create a table for this situation.

$x$ (# of days)	$y$ (Cost \$)
0	12
1	14.50
2	17

2. Write an equation for this situation.

$$y = 2.50x + 12$$

3. Graph the data. Include labels for each axis.



4. What is the rate of change or slope and y-intercept of this situation?

$$\text{R.O.C} = \frac{\$2.50}{1 \text{ day}}$$

$$\text{y-intercept} = 12 \\ (\text{fee of } \$12)$$

Is this relationship proportional or non-proportional? Explain how you know.

Non-proportional because there is a y-intercept; there is a flat fee