

Constant Rate of Change

I. Use a Table

DIRECTIONS: Find the unit rate to determine the constant rate of change.

- The table shows the amount of money a school club makes washing cars for a fundraiser. Use the information to **find the constant rate of change** in dollars per car.

Cars Washed	
Number	Money (\$)
5	40
10	80
15	120
20	160



Look for a pattern!

change in _____
 _____ = _____
 change in _____

The money earned increases by _____ for every _____ cars.

_____ → _____

Write as a unit rate.

So, the number of dollars earned increases by \$ _____ for every car washed.

Examples

DIRECTIONS: Find the unit rate to determine the constant rate of change. Highlight and underline important information.

1. The table shows the number of miles a plane traveled while in flight. Use the information to find the approximate constant rate of change in miles per minute.

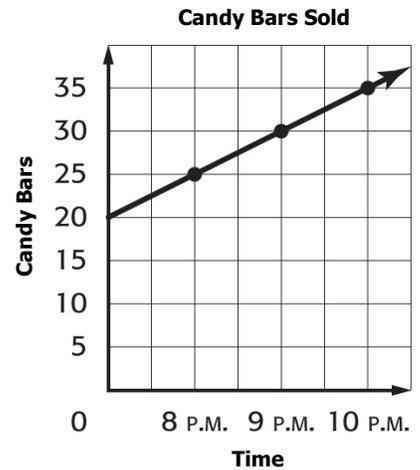
Time (min)	30	60	90	120
Distance (mi)	290	580	870	1,160

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2. The table shows the number of people that buses can transport. Use the table to find the constant rate of change in people per bus.

Number of Buses	2	3	4	5
Number of People	144	216	288	360

I. Use a Graph

- The graph represents the number of Candy bars sold at a school fundraiser. Use the graph to find the constant rate of change in number per hour.



To find the rate of change, pick any two points on the line,

such as _____ and _____.

Label the points:

$$\frac{\text{change in } \underline{\hspace{2cm}}}{\text{change in } \underline{\hspace{2cm}}} = \frac{Y_2 - Y_1}{X_2 - X_1} = \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}} \longrightarrow \underline{\hspace{2cm}}$$

Write as a unit rate.

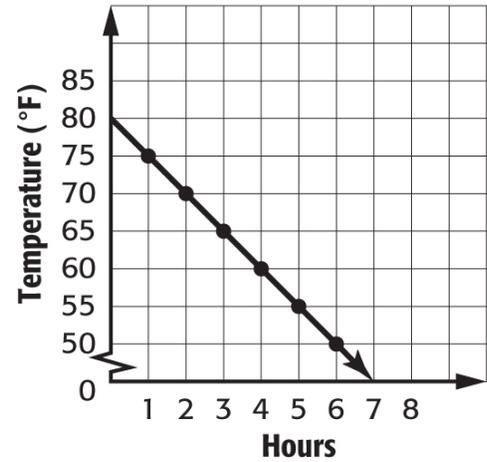
_____ candy bars per hour

Examples

DIRECTIONS: Find the unit rate to determine the constant rate of change by analyzing points on the graph.

1.

Temperature Change



2.

Meat Consumption

