



EXPLORE

Graphing Proportional Relationships

Name _____

CC10/CC11
Review

Most showerheads that were manufactured before 1994 use 5 gallons of water per minute. Is the relationship between the number of gallons of water and the number of minutes a proportional relationship?

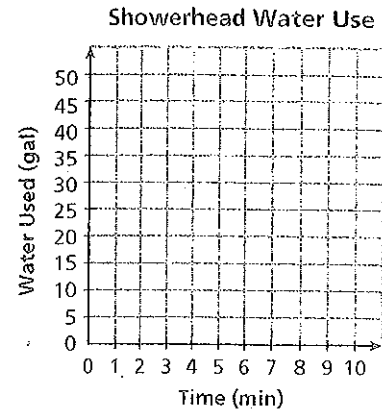
A Complete the table.

Time (min)	1	2	3		10
Water Used (gal)	5			35	

B Based on the table, is this a proportional relationship? Explain your answer.

C Plot the data from the table.

d. Based on the graph, is this a proportional relationship? Explain your answer.



EXAMPLE

Identifying Proportional Relationships

An Internet café charges a one-time \$5 service fee and then \$2 for every hour of use. Is this relationship a proportional relationship?

A Complete the table.

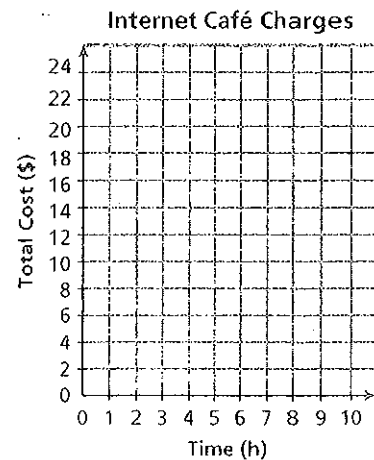
Time (h)	1	2	5		8
Total Cost (\$)	7			17	

B Plot the data from the table and connect the points with a line.

C The graph of the data is a _____.

The line does/does not go through the origin.

So, the relationship is _____.

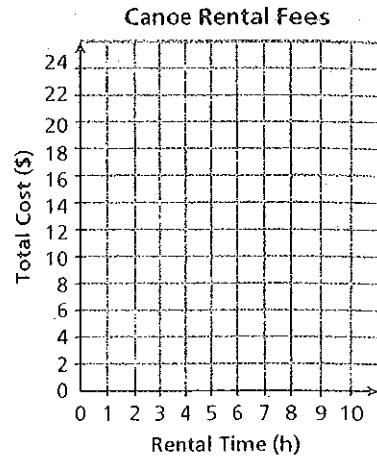


TRY THIS!

2a. Plot the data from the table and connect the points with a line.

Canoe Rental (h)	2	5	8	10
Total Cost (\$)	5	11	17	21

2b. Is this a proportional relationship? Explain.



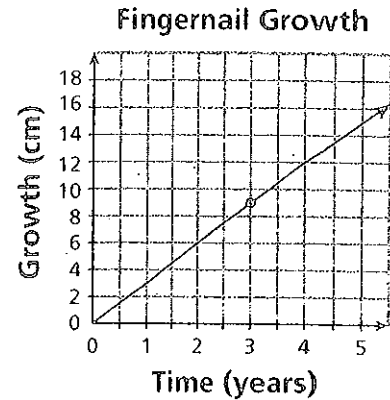
EXAMPLE Analyzing Graphs

The graph shows the relationship between time in years and the number of centimeters a fingernail grows.

A What does the point (3, 9) represent?

B What is the constant of proportionality? _____

C Write an equation for the relationship. _____



REFLECT

3a. What does the point (0, 0) on the graph represent?

3b. What is the rate at which a fingernail grows? How does this relate to the constant of proportionality?

Complete each table. Tell whether the relationship is a proportional relationship. Explain why or why not.

1. A student reads 65 pages per hour.

Time (h)	3	5		10
Pages			585	

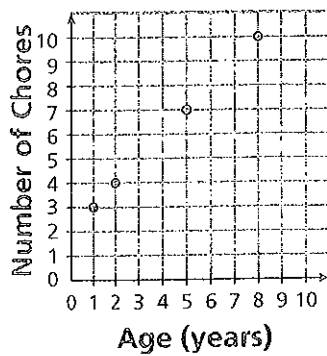
2. A babysitter makes \$7.50 per hour.

Time (h)	2		5	
Earnings		22.50		60

Tell whether the relationship is a proportional relationship. Explain why or why not.

3.

Chores



4.

Movie Rentals

