

Where in the World is.....

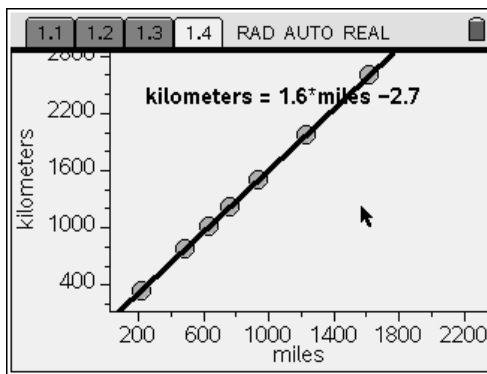


Describe the relationship you observe.

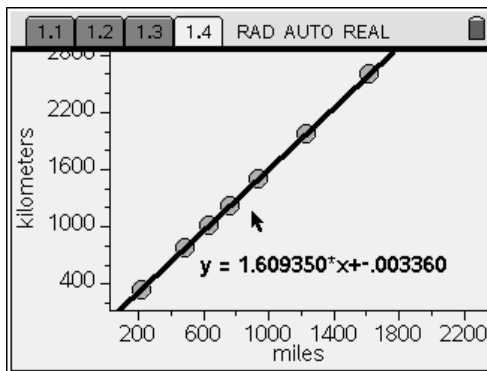
The data should be linear.

Add a movable line to your graph and estimate a line of best fit.

Answers will vary



Calculate the regression line for the data.



Write the equation for the line of best fit for your data.

$y = 1.6x$

What is the slope of your line?

The slope is 1.6.

What does the slope mean in the context of the problem?

The slope 1.6 means that there are 1.6 kilometers for each mile

Kyra found the distance between two locations to be 395.7 kilometers. What would this measure be in miles? Use mathematics to explain how you determined your answer. Use words, symbols, or both in your explanation.

$y = 1.6x$ A distance measured at 395.7 kilometers would be about 247.3

$395.7 = 1.6x$ measured in miles. To determine my answer I substituted 395.7

$247.3125 = x$ In my equation for y and solved for x .

What is the distance in kilometers between two cities if the distance between them is 2,395.6 miles? Use mathematics to explain how you determined your answer. Use words, symbols, or both in your explanation.

$y = 1.6(2395.6)$ A distance of 2,395.6 miles would be the same as 3832.96 mile

$y = 3832.96$ miles. I substituted 2395.6 into my equation in place of x and

solved for y .
