

Name _____

Graph and Analyze Relationships

The scale on a map is 1 in. = 4 mi. Two cities are 5 inches apart on the map. What is the actual distance between the two cities?

Step 1 Make a table that relates the map distances to the actual distances.

Map Distance (in.)	1	2	3	4	5
Actual Distance (mi)	4	8	12	16	?

Step 2 Write the number pairs in the table as ordered pairs.

(1, 4), (2, 8), (3, 12), (4, 16), (5, ?)

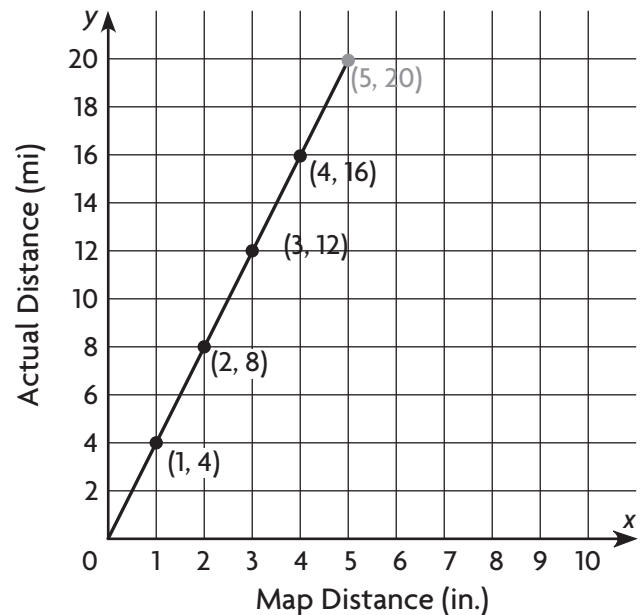
Step 3 Graph the ordered pairs. Connect the points with a line from the origin.

Possible rule: Multiply the map distance by 4 to get the actual distance.

Step 4 Use the rule to find the actual distance between the two cities.

So, two cities that are 5 inches apart on the map are actually 5×4 , or 20 miles apart.

Plot the point (5, 20) on the graph.



Graph and label the related number pairs as ordered pairs. Then complete and use the rule to find the unknown term.

- Multiply the number of yards by _____ to find the number of feet.

Number of Yards	1	2	3	4	5
Number of Feet	3	6	9	12	

