Name: _____ **Date:** _____ **Section:** _____

Link Sheet - MCAS 2012 – Scaled Map (G612Q12OR)

Story

Jan is using a map to plan a two-day hiking trip. The scale for the map she is using is shown below.

Scale
1 inch : $\frac{1}{2}$ mile

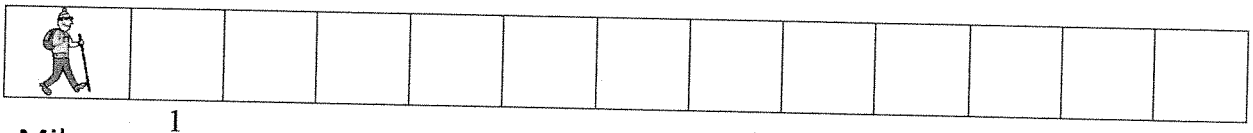
Questions

1) How many miles is 12 inches on the map?

2) How many inches on the map represents 1 mile?

Picture Model: Please label model below to show the scale.

Inches 1



Miles $\frac{1}{2}$

Data Table

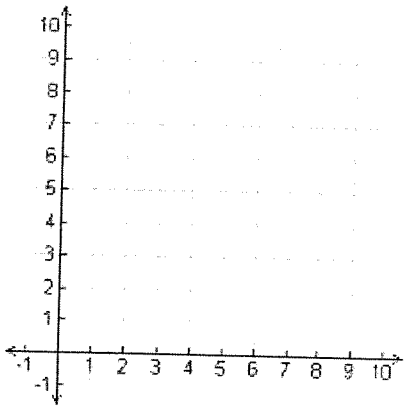
Using the scale, please fill in the following table.

Inches	Function	Miles
0		
1		1/2
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
n		

Bonus: Write out the algebraic equation for the table above.

Graph

Plot 4 points on the graph below. Be sure to label the x-axis and y-axis.



Bonus: Based on the scale Jan used, how many feet are represented by 1 inch on the map? Show or explain how you got your answer. (1 mile = 5280 feet)

Hint: Replace 5280 feet at 1 mile on the grid or graph.

Name: _____ Date: _____

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Question 12: Open-Response

Reporting Category: Measurement
Standard: Mathematics.6.RP.1.03 - Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
Standard: 6.M.3 - Solve problems involving proportional relationships and units of measurement, e.g., same system unit conversions, scale models, maps, and speed.

Jan is using a map to plan a two-day hiking trip. The scale for the map she is using is shown below.

Scale
1 inch : $\frac{1}{2}$ mile

a. The distance that Jan will hike on the first day is equal to 12 inches on the map. What is the actual distance, in miles, that Jan will hike on the first day? Show or explain how you got your answer.

b. The actual distance that Jan will hike on the second day is $5\frac{1}{2}$ miles. What distance on the map, in inches, represents $5\frac{1}{2}$ miles? Show or explain how you got your answer.

c. Based on the scale Jan used, how many feet are represented by 1 inch on the map? Show or explain how you got your answer. (1 mile = 5280 feet)

View Student Work