

The Graph Tells a Story

Aim/Essential Question: How do we graph?

Vocabulary/Concept Bank

As we read aloud, underline any word you think might be important. Write a question mark next to anything you don't understand. Draw a box around the question or task you are being asked to complete, if any.

The Graph Tells a Story

They say that a picture is worth a thousand words. While you rest in Fort Laramie and prepare for the next leg of your journey, you look at some posters describing certain aspects of what lies ahead. These posters contain **graphs** that show how two quantities are related. A graph can show the connection between days on the trail and dwindling supplies, or days elapsed and distance from a destination.

As you will see, graphs are closely related to equations and In-Out tables. As you imagine yourself on the Overland Trail, you will want to do just like the real-life travelers. You will gather as much information as you can and make sense of it in whatever way best helps you to arrive safely.

Not everyone in the nineteenth century traveled to the West in ox-drawn wagons. Some made the

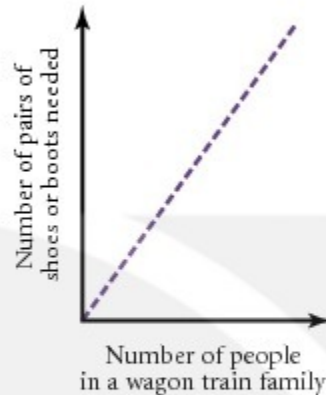
journey by sea. The new POW in this segment, *Around the Horn*, poses a question that might have been on the minds of some travelers on board a ship.



Important term	Definition

Wagon Train Sketches and Situations

A graph sketch can be used to describe a real situation. For example, this graph sketch shows that the number of pairs of shoes and boots needed for a wagon train family unit depends on the number of people in the family unit.



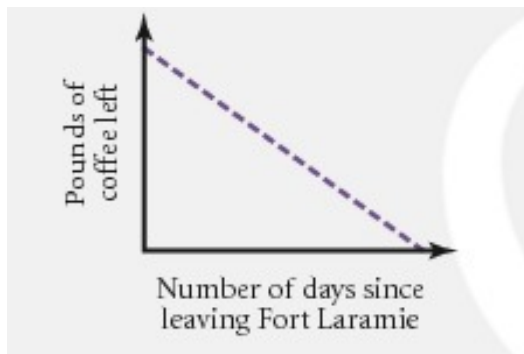
Your task will be to look at sketches and say what you think is happening. You will also create sketches to represent situations.

Part I: From Sketch to Situation

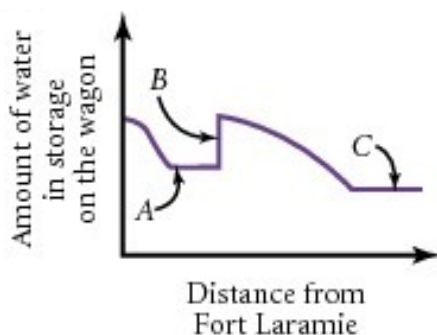
When you arrive in Fort Laramie, you see posters promoting the journey westward. These posters contain graph sketches describing relationships concerning the trip west.

For each graph, describe what's happening in the situation that the graph represents. Then answer the specific question for that graph.

1. According to this graph sketch, do people on the trail drink the same amount of coffee each day?



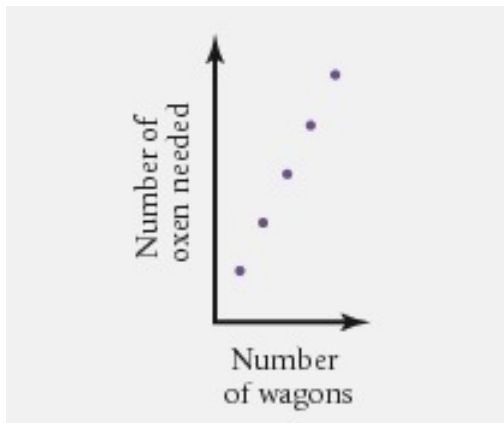
2. What do you think is happening at the points on the graph sketch labeled A, B, and C.



3. At what part of this graph sketch was the wagon train moving fastest? Mark your answer on the graph below and explain in the right column.



4. Why does this graph sketch consist of individual dots instead of a line?



Part II: From Situation to Sketch

Here are several descriptions of relationships. For each description, sketch a graph that illustrates the relationship.

5. Wagons of the same size and type can hold a fixed number of people. Make a graph sketch that shows the relationship between the number of wagons (of a fixed size and type) and the number of people those wagons carry.

<p>6. As the number of settlers on the trail increased, the buffalo population declined. Make a graph sketch that shows the relationship between the number of settlers and the buffalo population.</p>	
<p>7. A man rides his horse from his ranch to a neighboring ranch without stopping. His route takes him through the center of town. Make a graph sketch that shows the relationship between how long he has been riding and his distance from the center of town.</p>	

Summary

A graph sketch of the fear level of a horror movie is shown below. Complete the WITsi task using the graph sketch.

	<p>I know that someone was killed in the horror movie near points _____, because _____.</p> <p>I know that someone was killed in the horror movie near points _____, but _____.</p> <p>I know that someone was killed in the horror movie near points _____, so _____.</p>
--	--