## Lesson 3: Measure on a Map

* Let’s add and subtract measurements of length.

### Warm-up: Notice and Wonder: From Sea to Shining Sea

What do you notice? What do you wonder?



### 3.1: Measure on the Map

Draw a line to represent the distance between cities on the map. Then measure the length in centimeters.

1. Noah started in Trenton, New Jersey.
	1. First, he traveled to Harrisburg, Pennsylvania. \_\_\_\_\_ cm
	2. Next, he traveled from Harrisburg to Indianapolis, Indiana. \_\_\_\_\_ cm
	3. Last, he traveled from Indianapolis to St. Paul, Minnesota. \_\_\_\_\_ cm
2. Diego started in Sacramento, California.
	1. First, he traveled to Phoenix, Arizona. \_\_\_\_\_ cm
	2. Next, he traveled from Phoenix to Santa Fe, New Mexico. \_\_\_\_\_ cm
	3. Last, he traveled from Santa Fe to Topeka, Kansas. \_\_\_\_\_ cm
3. Lin started in Austin, Texas.
	1. First, she traveled to Oklahoma City, Oklahoma. \_\_\_\_\_ cm
	2. Next, she traveled from Oklahoma City to Nashville, Tennessee. \_\_\_\_\_ cm
	3. Last, she traveled from Nashville to Augusta, Maine. \_\_\_\_\_ cm
4. Find the total length of each student’s trip. Represent the total with an equation.
	1. Lin’s total
	2. Diego’s total
	3. Noah’s total

### 3.2: How Much Longer?

Use your map and the stories from the previous activity to answer the questions. Represent each story with an equation with a symbol for the unknown length.

1. How much shorter is the total length of Diego’s trip than the total length of Lin’s trip?
2. How much longer is the total length of Diego’s trip than the total length of Noah’s trip?
3. How much shorter is the total length of Noah’s trip than the total length of Lin’s trip?



© CC BY 2021 Illustrative Mathematics®