Unit 4, Lesson 18

Trash Talk

Let's multiply to solve problems about the area of the Great Pacific Garbage Patch.

Warm-up

Notice and Wonder: Trash and Ice

What do you notice? What do you wonder?

Activity 1

The Size of One Kilometer

1. Mai walked around a soccer field 2 times. She thinks she walked about 1 kilometer. Do you agree with Mai? Explain or show your reasoning.

2. Decide whether each distance is less than 1 kilometer, about 1 kilometer, or greater than 1 kilometer.

   a. the distance across the state you live in

   _____

   b. the distance from your home to school

   _____

   c. the distance from your school room to the restroom

   _____

   d. the distance you travel on a vacation in the car

   _____

Activity 2

So Much Trash

The Great Pacific Garbage Patch is a large area in the Pacific Ocean where trash has accumulated. By 2022, some estimates indicated that the garbage covered about 1,600,000 square kilometers of the surface of the ocean.

1. Rhode Island is the smallest state. It is about 77 kilometers long and 60 kilometers wide. Which is larger, the garbage patch or Rhode Island? Explain or show your reasoning.

2. Delaware is about 154 kilometers long and 48 kilometers wide. Which is larger, the garbage patch or Delaware? Explain or show your reasoning.

3. New Mexico is about 596 kilometers long and 552 kilometers wide. Which is larger, the garbage patch or New Mexico?

4. Circle an area on the map of the continental United States that estimates the area of the garbage patch. Explain or show your reasoning.