

## Lesson 8: Meters and Kilometers

- Let's explore measurements in meters and kilometers.

### Warm-up: Number Talk: Times Hundreds and Thousands

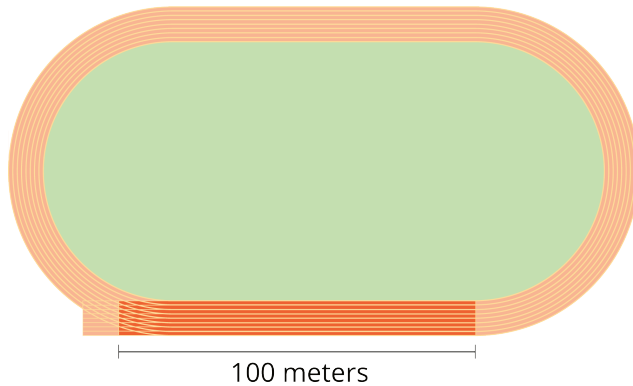
Find the value of each expression mentally.

- $3 \times 100$
  
  
  
  
  
  
  
  
  
  
- $40 \times 100$
  
  
  
  
  
  
  
  
  
  
- $43 \times 100$
  
  
  
  
  
  
  
  
  
  
- $43 \times 1,000$

## 8.1: How Long is One Kilometer?

There are 1,000 meters in 1 kilometer.

1. The darkly shaded section of the track is the length of a 100-meter race. How many 100-meter races does it take to travel 1 kilometer?



2. Your teacher will give you images of something with a length or height measured in meters.

About how many of the items given to you are needed to make 1 kilometer?  
Explain or show how you know.

3. Work with your group to write a number in the blank so that each statement is true.

- a. One kilometer is the length of (about, exactly) \_\_\_\_\_ soccer fields.
- b. One kilometer is the length of (about, exactly) \_\_\_\_\_ Statues of Liberty.
- c. One kilometer is the length of (about, exactly) \_\_\_\_\_ Olympic-size swimming pools.
- d. One kilometer is the length of (about, exactly) \_\_\_\_\_ basketball courts.

4. Estimate where you might end up if you travel 1 kilometer from your school's front door.

## 8.2: Meters and Kilometers

1. Complete the table with the missing lengths in meters or kilometers.

kilometers (km)	meters (m)
$\frac{1}{2}$	
1	1,000
5	
	6,000
$8\frac{1}{2}$	
10	
	12,000
27	

2. Andre says 100 meters is longer than 10 kilometers. Do you agree or disagree? Explain or show your reasoning.

3. Which is greater? Be prepared to explain how you know.

- a. 2,000 meters or 3 kilometers
- b. 500 meters or 1 kilometer
- c. 14 kilometers or 14,000 meters
- d. 8 kilometers or 80,000 meters