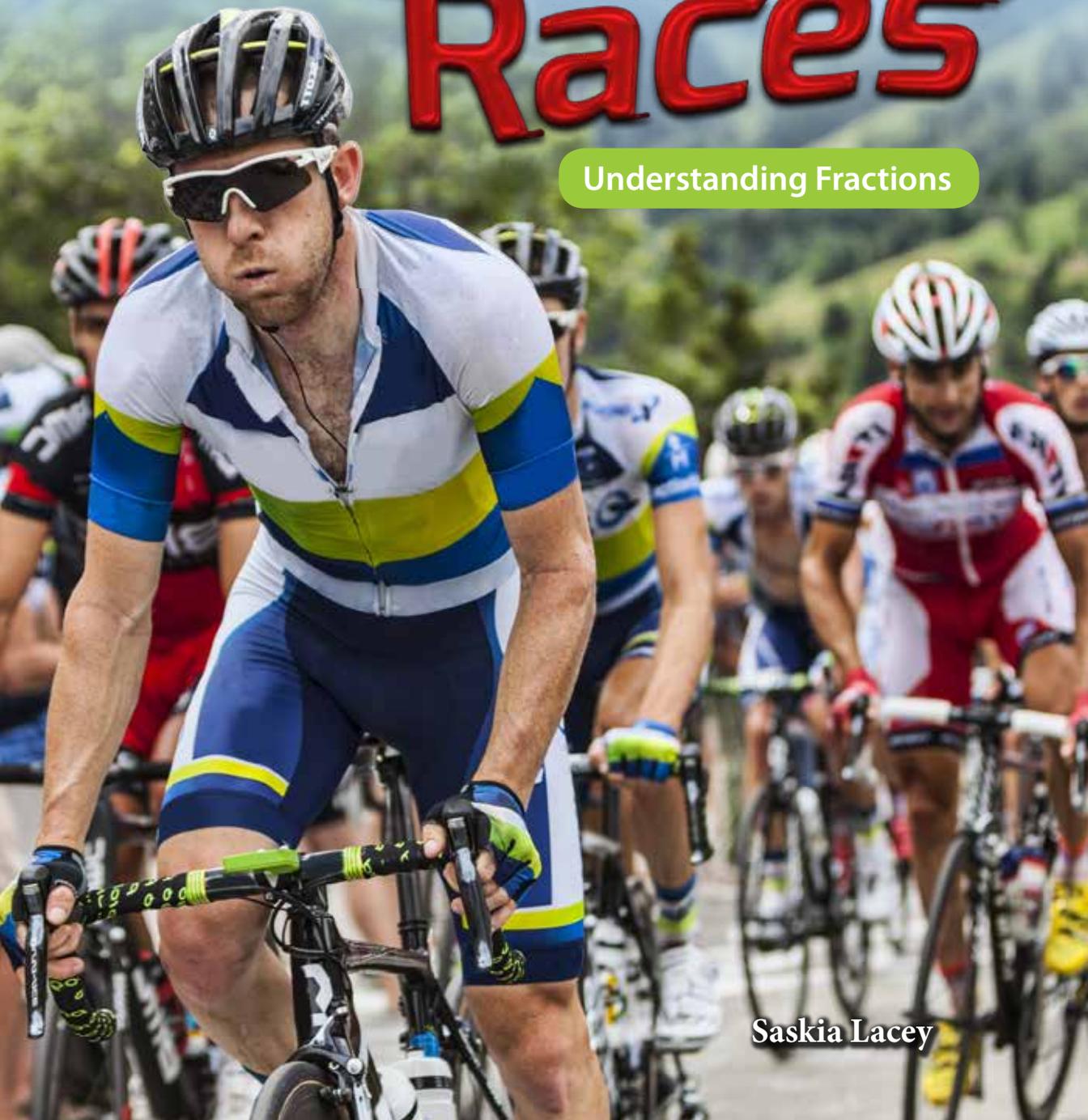


**Spectacular Sports**

# World's Toughest Races

Understanding Fractions



Saskia Lacey

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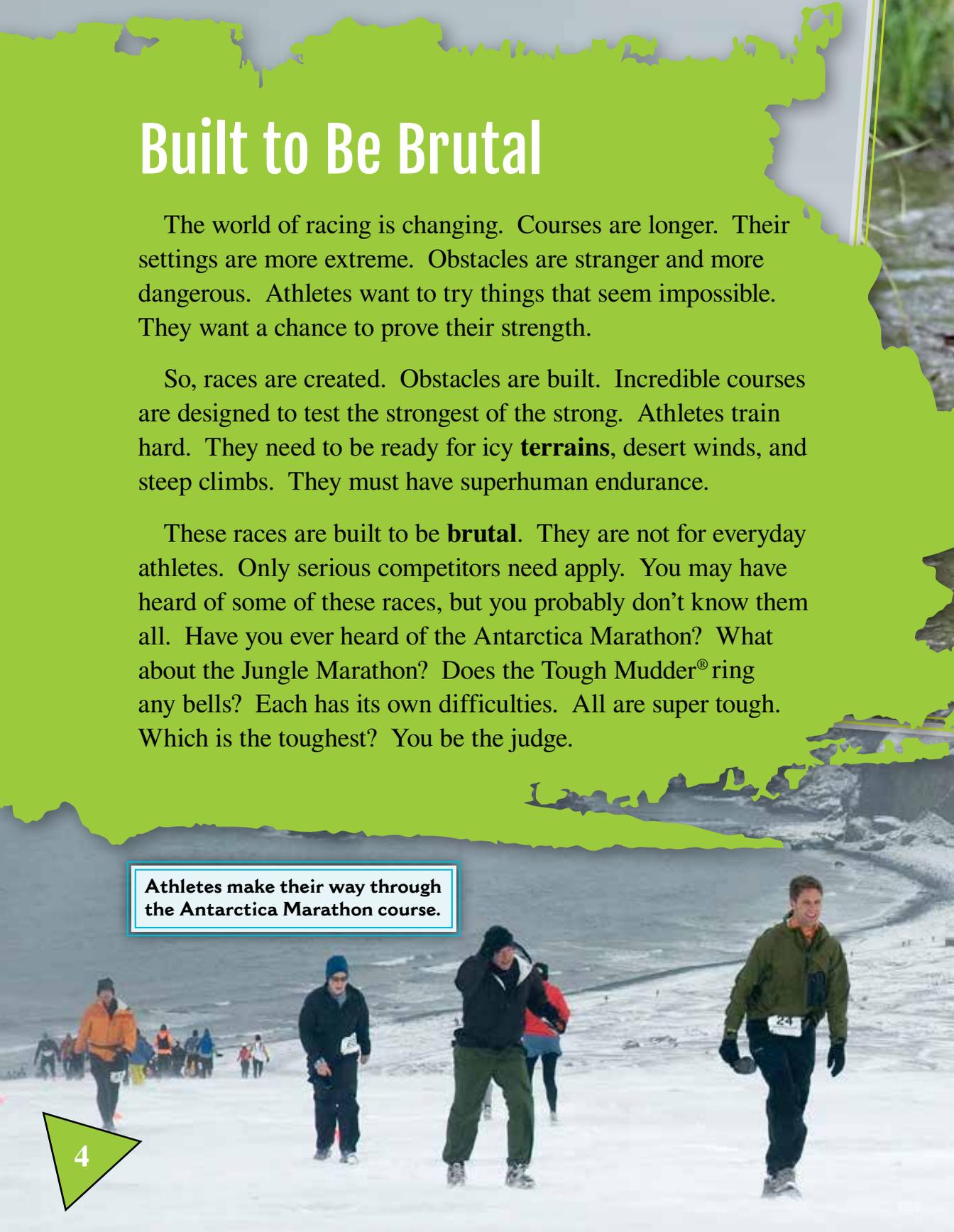
# Built to Be Brutal

The world of racing is changing. Courses are longer. Their settings are more extreme. Obstacles are stranger and more dangerous. Athletes want to try things that seem impossible. They want a chance to prove their strength.

So, races are created. Obstacles are built. Incredible courses are designed to test the strongest of the strong. Athletes train hard. They need to be ready for icy **terrains**, desert winds, and steep climbs. They must have superhuman endurance.

These races are built to be **brutal**. They are not for everyday athletes. Only serious competitors need apply. You may have heard of some of these races, but you probably don't know them all. Have you ever heard of the Antarctica Marathon? What about the Jungle Marathon? Does the Tough Mudder® ring any bells? Each has its own difficulties. All are super tough. Which is the toughest? You be the judge.

Athletes make their way through the Antarctica Marathon course.





Contestants compete in the Beaver Run, Lithuania's version of the Tough Mudder obstacle course.



# Tough Around the World

The first course seems simple. Racers do not face weird hurdles. There are no wild locations. The weather is not extreme. In this race, there is just one city block. Easy, right? Well...maybe not.

The **Self-Transcendence** (tran-SEN-dents) 3100 Race takes place every year in Queens, New York. The race is 3,100 miles (5,000 kilometers) long. That is like running all the way across the United States! And, there is one more challenge. Runners have to finish the race within 52 days. Athletes must run almost 60 mi. (100 km) a day to finish on time.

It may seem impossible. But, the athletes who finish have a lot to brag about. It is the longest footrace in the world!

Many runners don't want to just finish the race. They want to beat the record. In 2015, the winner finished in just 40 days, 9 hours. He had to run a little over 76 mi. (122 km) each day.

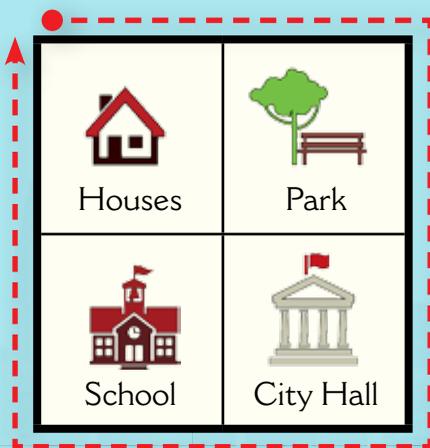


Ashprihanal Aalto set the record in 2015.



## LET'S EXPLORE MATH

Kareen takes a walk around her block every day. Her city block looks like this:



1. How many **parts** make up Kareen's **whole** block?
2. What do you notice about the size of each part of the block?
3. What **fraction** of the block is City Hall?



# Problem Solving

Taj and his friends love to ride bikes. But, they aren't quite ready for the **grueling** Le Tour de France. So, they have started their own race, Le Tour de Park! It's not Le Tour de France, but they have fun just the same. Their course is 1 km long through the park, with markers along the way. Just like the riders of Le Tour de France, Taj and his friends each want to be the winner! Use the clues to plot Taj and his friends at their current points in the race on the number line. Then, answer the questions.

1. Who is closer to the  $\frac{4}{8}$  marker on the course: Dora or Jen?
2. Is Ben closer to the  $\frac{4}{8}$  marker or the finish line?  
How do you know?



### Clues

- Taj is at the  $\frac{4}{8}$  marker.
- Ada is  $\frac{6}{8}$  of the way from the finish line.
- Sean is at the  $\frac{1}{8}$  marker.
- Dora is  $\frac{6}{8}$  of the way to the finish line.
- Jen is  $\frac{3}{8}$  of the way to the finish line.
- Ben is  $\frac{1}{8}$  of the way from the finish line.

### 1 km Course

