GOING THE DISTANCE!

Grade Five

Math SOL 5.5

OBJECTIVE: THE STUDENT WILL DEVELOP AN UNDERSTANDING OF THE LENGTH OF THE VARIOUS RACES AND CREATE AND SOLVE PROBLEMS RELATED TO THE DATA FROM THE UPCOMING ROAD WORLD CHAMPIONSHIPS.

Virginia Standards:

a) find the sum, difference, product, and quotient of two numbers expressed as decimals through thousandths (divisors with only one nonzero digit); and

b) create and solve single-step and multistep practical problems involving decimals.

Materials: Worksheet

Background Information:

Share with your students the following information related to the Richmond 2015 UCI Championships.

The Road World Championships (Worlds) will take place in Virginia's historic capital city from September 19-27, 2015. (Have students identify Richmond on a map and discuss the distance using kilometers and miles from their city.) This is the first time in 29 years that the World Championships will be held in the United States. This is truly a great global sporting event. There will be more people watching the World Championships (300 million) than the Super Bowl (115 million viewers).

Approximately 1,000 men and women from among the world's top cyclists, representing about 75 countries, will compete in the 12 championship races. The World Championships and two of the three Grand Tours (the Giro d'Italia and the Tour de France) form the Triple Crown of Cycling. But unlike the Tour de France or any other pro race, at the World Championships you represent your country's team, not your professional trade team. It is a rare opportunity for the athletes to compete for their country, just as they do during the Olympic Games.

The athletes will compete in three race events including the traditional Road Race, the Individual Time Trial, and the recently introduced Team Time Trial. World Champions are crowned for each event and they are entitled to wear the rainbow jersey until the next Championships.

Activity:

Have students create a multistep word problem that could be solved using some of the data from the chart. Students should be instructed to solve their problem on a separate sheet of paper and set aside.

- 1. When most students are ready, have students pair up and exchange their problems with a classmate. Once students have solved each other's problems, compare their answers and discuss any differences they may have had.
- 2. Select a few problems to share with the entire class and discuss strategies for solving.

Extension Activity:

Have student research additional information regarding the upcoming race and write additional problems to be shared with classmates.

Fun Fact

In October 2014, nearly two dozen Team USA cyclists gathered in Richmond to train and familiarize themselves with the courses for the world road championships.



Bonus Activity:

- 1. Which country held the 2014 UCI Road World Cycling Championships?
- 2. How many times have the UCI Road World Cycling Championships been held? How many times have they been held in the United States? When and where?
- 3. How many days until the 2015 UCI Road World Cycling Championships begin?

NAME	DATE

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Below you will find a chart containing some of the distance information related to the upcoming Road Races. Create a multistep word problem that could be solved using some of the data from the chart. Once created, solve your problem on a separate sheet of paper and set aside.

Your teacher will give instructions about when to exchange your problem with a classmate. Solve your classmate's problem. When you and your classmate have solved each other's problems, compare your answers and discuss any differences you may have had.

RICHMOND 2015 – RACE DISTANCES

Race	Lap Distance (miles)	Total Race Distance (miles)	Elevation Change (feet)
Road Circuit: Elite Men	10	161	339
Road Circuit: Elite Women	10	80.5	339
Time Trial Circuit: Individual	9.3	18.6	316
Team Time Trial	1	24.1	787

My multistep word problem: