Unit 9, Lesson 9

Measuring Long Distances over Uneven Terrain

Let's measure long distances over uneven terrain.

9.1 How Far Is It?

How do people measure distances in different situations? What tools do they use? Come up with at least three different methods and situations where those methods are used.

9.2 Planning a 5K Course

Imagine the school will be holding a 5K fundraising walk on the school grounds. Your class is supposed to design the course for the walk.

1. What will you need to do to design the course for the walk?

2. Come up with a method to measure the course.

CC BY NC Illustrative Mathematics, based on IM 6–8 Math, CC BY Open Up Resources.

9.3 Comparing Methods

Let's see how close different measuring methods are to each other. Your teacher will show you a path to measure.

1. Use your method to measure the length of the path at least two times.

2. Decide what distance you will report to the class.

3. Compare your results with another group's. Express the differences between the measurements in terms of percentages.

4. Discuss the advantages and disadvantages of each group's method.