Mildred D. Taylor’s *Roll of Thunder, Hear My Cry* (Puffin, 1991) is the story of a young African American girl, Cassie, and her family living in Mississippi in the 1930s, during which time African Americans were threatened, ridiculed, and burned alive. In this investigation, students are able to develop a more personal understanding of what life was like for those young African Americans attending school in the 1930s. They determine their own walking rates and create tables and graphs to represent how far they can travel in a given time. Students also use maps to identify starting and ending points for walks of certain distances as a way of developing a sense of distance. This activity comes from *Math and Literature, Grades 6–8* (Math Solutions Publications, 2004), by Jennifer Bay-Williams and Sherri Martinie.

I read Chapter 1 of *Roll of Thunder, Hear My Cry* to the class. I asked students if they recalled how long it took Cassie and her friends to get to school (it took one hour). Then I asked them to share how they got to school each day and approximately how long it took them.

Next I asked them how far they thought they could walk in one hour. I had each student record his or her individual estimate in kilometers (or miles) and then write a statement naming a beginning and an ending landmark for the walk, such as “I could walk from my house to the mall in one hour.”

After the students recorded their estimates, we talked about how they might determine the distance they could walk in an hour without actually walking for an hour. In groups of three, the students discussed their strategies and then shared their strategies with the whole class. Students came up with different ways, but I decided to have everyone use the same approach.

We marked off distances outside using a meter wheel and then, working in groups of three, the students collected data about how far they could walk in thirty seconds. I assigned the following roles: timer, walker, and measurer. I explained each role to the students: The timer tells the walker when to start and stop; the walker walks normally for thirty seconds; at the completion of the walk, the measurer measures the distance walked (in meters). Then the walker records this information in his or her notebook. Students would rotate roles until each had a turn at each role.

Using a calculator and the data collected from their thirty-second walks, students determined the meters they could cover in an hour—in other words, each student’s walking rate in meters per hour. Using their walking rates, students generated tables and graphs to illustrate the distances they could travel in one, two, three, or more hours.

As an extension, I posed a problem based on information from the novel: Moe Turner, a friend of Cassie’s, walked 3.5 hours to school. I asked them to use their tables and graphs to figure how far they would walk in that amount of time.
Since distances in the United States are in miles (and miles are more familiar to U.S. students), but school tracks and meter wheels are in metric distances, U.S. students will likely have to do conversions. They can either convert their estimates to kilometers or convert their measured distances to miles. The formulas are as follows \((k = \text{kilometers}, \ m = \text{miles})\):

- to convert miles to kilometers: \(k = 0.62m\)
- to convert kilometers to miles: \(m = 1.61k\)

Once students figured out how far they could go in 1 hour and in 3.5 hours, I gave each group a map of the city to study and asked them each to determine beginning and ending places for a 1-hour walk and for a 3.5-hour walk.