

Blackboards and Computers

Class Activity – Long Walk



By the late 1800s, there were thousands of country schools across South Dakota, but many students still had to walk 2-3 miles to get there. During this activity, your students will calculate how long it would have taken to get to school when walking and riding a bike. Use a football field to calculate how long it would take to walk/ride 300' (length of field without end zones). Use this data to estimate the time taken to get to school.

Process:

- Using a stopwatch, time how long it takes to walk the length of the football field – 300 feet.
- Using a stopwatch, time how long it takes to ride a bike the length of the football field – 300 feet.
- Now, you will calculate how long it would have taken to get to school if you had to walk one, two, and three miles.

- First, calculate how many times farther one, two, and three miles are than 300'.

$$\frac{5280'}{300'} = 17.6$$

Rounding, one mile is approximately 18X the length of a football field. Using 17.6, two miles would be approximately 35X the length; three miles would be approximately 53X the length.

- 1 mile – 18X more
- 2 miles – 35X more
- 3 miles – 53X more

Walking: Multiply the amount of time it took in seconds to walk the 300 feet by the values above to estimate the amount of time to walk one, two, and three miles.

- Divide by 60 sec/min to get the minutes it would take.

Riding a Bike: Multiply the time it took in seconds to ride the 300 feet by the values above to estimate the time to ride one, two, and three miles.

- Divide by 60 sec/min to get the number of minutes it would take.