

MATH

CHAPTER 9

The War Starts

LEXINGTON AND CONCORD; PATRIOT ALARM SYSTEM; EXPRESS RIDERS

Subject Matter Objectives

The students will apply math techniques to expand understanding of the following Revolutionary War events:

- Compute time Revere spent riding to learn more about Paul Revere's ride.
- Compute average to learn about the speed at which Revere's horse rode over hilly terrain.
- Compute using addition to understand how far Brown Beauty carried Revere.
- Compute using multiplication to learn how many militiamen rallied to Lexington and Concord.
- Compute ratio to understand the differences in the strengths of opposing forces.
- Compute division to better understand the express rider system.

Back story:

Paul Revere was riding Brown Beauty (a borrowed horse of exceptional strength and speed) the night that he spread the alarm. En route to Lexington, he and his mount had raced over rough and sometimes steep terrain, at times fleeing from soldiers through the countryside. Later that same night, other British soldiers stole the horse from Revere between Lexington and Concord. Listen to what happened next...

To hear the audio, double click image ~



1. Paul Revere rode Brown Beauty to Lexington, a distance of about 12.5 miles, stopping or pausing at almost every house along the way to give the alarm. At one point the horse and rider had to race across the countryside to escape from British soldiers. Brown Beauty carried Paul Revere out of Charlestown around 11 pm and they arrived in Lexington around 12:30 am.
 - A. How long did the ride to Lexington take?
 - B. What was their average speed?
2. After leaving Lexington, Brown Beauty was already tired when the British soldiers stole her and rode away.
 - A. If two British soldiers were on her back and each soldier weighed 160 pounds and carried 20 pounds of weapons and gear, how much weight was Brown Beauty forced to carry?
3. Militia Men in each town were supposed to assemble whenever they heard an alarm, and the alarm system was extraordinary — express riders, church bells, alarm guns. The night that Revere and Dawes rode for Lexington, they set the whole system in motion, and more and more

express riders quickly roused people in ever-expanding circles around Boston. By the time the British were wading out of their boats to begin the march, militia men from towns even 25 miles away were on their way to them.

- A. If for each of the 700 British soldiers who set out for Lexington and Concord + the 1,000 British reinforcements who came later, 2 militia men assembled, how many militiamen participated in the Battle of Lexington and Concord?
- B. What is the ratio of British to Patriot fighters?

(NOTE: Actually, the number of militia men was even higher by the end of the battle.)

- 4. Riders quickly took news of Lexington and Concord to the rest of the colonies. Patriots also sent the news of their victory to supporters in England and France by the fastest ship available.
 - A. If a horse should not be ridden fast over hilly terrain for more than 15 miles without an extended rest, and if express riders rode nonstop from Boston to New York to get news to Patriots, a distance of 215 miles, how many changes of horse would be needed?

The image of the painting of Paul Revere
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