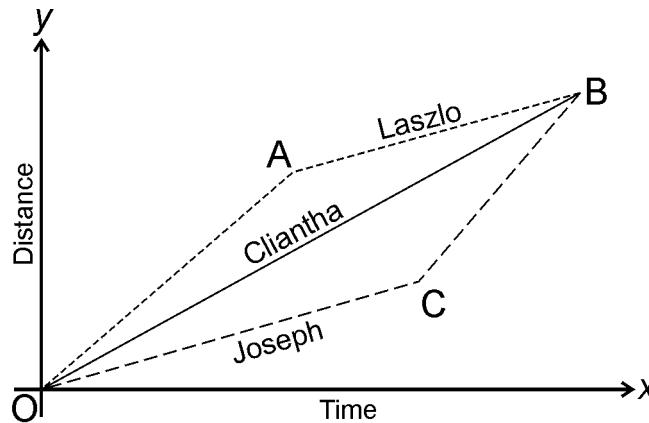


Bike Graphs

NAME _____

Bicyclists claim that the longest steep hill in the world is in Haleakala National Park, and they have the sore muscles to prove it! The hill leads up a volcano on the island of Maui, Hawaii. Over the course of a 38-mile road, this hill rises from sea level at the coast to over 10,000 feet.

Three proficient cyclists—Laszlo, Cliantha, and Joseph—rode this entire hill to the top. They started together at the bottom of the volcano, and they reached the top at the same time. The graph shows the distance each cyclist with respect to time.



1. Estimate the vertical coordinate of B. Justify your guess.
2. Estimate the horizontal coordinate of B? Justify your guess.
3. What are the coordinates of B?
4. What are the coordinates of A? Explain your answer.
5. What are the coordinates of C? Explain your answer.

6. Which cyclist had a steady speed all the way up the hill? How do you know?

7. Which cyclist was slow at first and then sped up? How do you know?

8. How would you describe Laszlo's speed?

9. The three cyclists started together at the bottom, and they reached the top at the same time. Is there any other time that Laszlo, Cliantha, and Joseph were at the same height at the same time? How do you know?

10. Find the slope of each line segment on the graph. What does each slope mean in the context of the problem?