Post-Video Questions Preview

Here are some questions youll be asked after you finish watching the videos. Please read through these before watching the videos.

Problem 1 Suppose Jason is sailing his boat straight across a lake at a constant rate of 0.12 meters/second.

- (a) Let Δt represent a change in the number of seconds elapsed during some part of Jasons ride and let Δd represent the corresponding change in the number of meters Jason traveled. Write an equation that expresses the relationship between Δt and Δd .
- (b) Jason passes an island while traveling at this constant rate. At 10:30 AM, Jason is 3 meters past the island. At what time did Jason pass the island?

Problem 2 Imagine you are driving on the highway and vary your speed to maintain a constant fuel efficiency. Select the choices to complete the statement to most accurately capture what it means to drive with a constant fuel economy: For [1] [2], the [3] is [4].

- [1]: fixed, increasing, decreasing
- [2]: gallons, distance, amount of change in gallons, amount of change in distance
- [3]: gallons, distance, amount of change in gallons, amount of change in distance
- [4]: constant, increasing, decreasing

Problem 3 Suppose x and y represent the measures of two quantities and y changes at a constant rate of -0.9 with respect to x. As x changes from 7 to 9.5, how much does y change?

Learning outcomes: Author(s):