

Video Set Introduction

Before watching the videos, think about and answer these questions to the best of your ability. We want to know how you're thinking about the ideas, so your answers will always be marked correct.

Problem 1 *Imagine you are driving on the highway and set your cruise control to maintain a constant speed. Select the choices to complete the statement to most accurately capture what it means to travel at a constant speed:*

For **Multiple Choice:** **Multiple Choice:** the **Multiple Choice:** is **Multiple Choice:**

- | | | | |
|----------------|----------------------------------|----------------------------------|----------------|
| (a) fixed | (a) time | (a) time | (a) constant |
| (b) increasing | (b) distance | (b) distance | (b) increasing |
| (c) decreasing | (c) amount of change in time | (c) amount of change in time | (c) decreasing |
| | (d) amount of change in distance | (d) amount of change in distance | |

Problem 2 *Suppose Kim is riding her bike along a straight road at a constant rate of 0.56 km/min. Kim passes a coffee shop while traveling at this constant rate. At 9:30 AM, Kim is 3 km past the coffee shop. How far is Kim from the coffee shop at 9:54.6 (i.e., 24.6 minutes past 9:30 AM)? (If you use a decimal approximation, include at least 2 decimal places. You may also enter your answer unsimplified, like 1+2.)* km