




Sample Markings for a Math Textbook Page

- = key concepts
 = unfamiliar vocabulary
 handwriting = student comments and questions

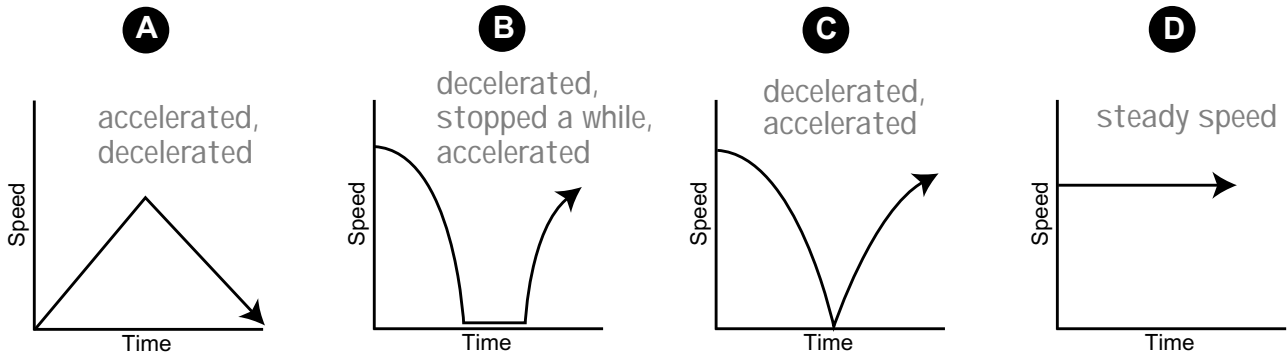
Speed

Speed is the rate at which an object moves. On a graph, a steady speed is depicted by a horizontal line. A line moving in an upward trend signals acceleration. A line moving in a downward trend signals deceleration.

steady speed 
 acceleration 
 deceleration 

Exercises

The examples and exercises below depict graphs of a bicycle rider's path. Complete each exercise by analyzing the graphs.



1. A bicyclist slowed down and stopped at a traffic light. After some time, the light turned green and the bicyclist went on her way again. Which of the graphs best depicts the situation illustrated here?

1. bicyclist decelerated
2. bicyclist stopped a while
3. bicyclist accelerated

2. Upon seeing a traffic light in the distance, a bicyclist began to decelerate. When he reached the light however, it changed to green and the bicyclist immediately began to accelerate. Although he anticipated stopping and having to wait at the traffic light, he never needed to. Which graph best depicts the situation illustrated here?

1. bicyclist decelerated
2. bicyclist didn't stop
3. bicyclist accelerated

* didn't stop