

# Wednesday Reading Assessment: Unit 1, Acceleration and Kinematics

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## 1 Chapter 2 - Kinematics

1. Plus and minus signs are used in one-dimensional motion to indicate direction. What is the sign of an acceleration that reduces the magnitude of a negative velocity? Of a positive velocity?
  
  
  
  
  
  
  
  
  
  
2. What is the acceleration of a rock thrown straight upward on the way up? At the top of its flight? On the way down?
  
  
  
  
  
  
  
  
  
  
3. Which of the following is true of a rock thrown straight upwards that is being accelerated downwards by gravity?
  - A: The vertical displacement versus time is a quadratic curve with a peak at the maximum height.
  - B: The vertical displacement versus time is a linear line.
  - C: The vertical displacement versus time is a flat line.
  - D: The vertical displacement versus time is a quadratic curve with a valley at the minimum height.
  
4. Which of the following is true of a car that is decelerating because the driver is pressing the brake pedal?
  - A: The horizontal velocity versus time is a quadratic curve with a peak at the maximum height.
  - B: The horizontal velocity versus time is a linear line with negative slope.
  - C: The horizontal velocity versus time is a linear line with positive slope.
  - D: The horizontal velocity versus time is a quadratic curve with a valley at the minimum height.