

Dr. Joshi's Conceptual Physics Worksheet: Acceleration

1. Define each of the following.
 - a. speed

 - b. velocity

 - c. acceleration

2. A car travels at a constant speed of 65 miles per hour. What is its acceleration?

3. A kid sits on a carousel that is constantly spinning. Is the kid accelerating?

4. A runner is running at 4.5 m per second. Within one second, she speeds up to 6.5 m per second. Determine her acceleration in meters per second per second.

5. A car goes from exactly zero miles per hour to 60.0 miles per hour in 10.0 seconds.
 - a. Determine the acceleration of the car in miles per hour per second.

 - b. Determine the acceleration of the car in miles per second per second.

 - c. Determine the acceleration of the car in meters per second per second.