Chapter 2A Review Question Answers

Review Questions

3. Instantaneous speed measures how fast something is moving at a certain moment in time. Average speed is the total distance divided by the total time.

4. Instantaneous speed

5. Velocity is the speed in a defined direction (3 m/s south).

6. No, because the speedometer does not show the direction and you may or may not have changed direction.

7. Speed=Gas Pedal and Brake Velocity=Gas Pedal, brake and steering wheel

8. Acceleration

10. 0 km/hr/s (not changing or constant speed)

11. A=100 km/hr /10 seconds= 10 km/hr/s

12. 2 km/hr 4 km/hr 10 km/hr

Activities

1. Any description where you measure a distance and how long it takes to move that distance. Average speed is then distance divided by time.

Think and Explain

1. The object can be moving at a constant speed and changing direction (going around a turn). The object is accelerating if the direction changes.
2. 0 km/s/s (constant speed in a straight line)
3. Both have the same acceleration Acar=(60km/hr-50km/hr)/t = 10 km/hr/t and Abike=(10 km/hr-0 km/hr)/t= 10 km/hr/t

9. 20 m/s (Vf=Vi+At) = (0 + 2 m/s/s \* 10 seconds) = 20 m/s