

Student Name: \_\_\_\_\_

Date: \_\_\_\_\_

Period #: \_\_\_\_\_

Unit 1: Quiz 14  
**1-Dimensional Motion**

1. The speedometer in a car also has an odometer which records the distance traveled.

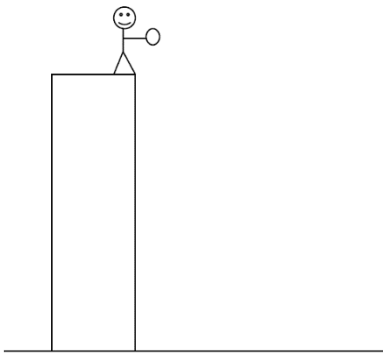


- a. If the odometer reads 25 km at the beginning of the trip and a half hour later it reads 60 km, what is the average speed?
- b. Would it be possible to attain this average speed and never exceed a reading of 70 km/h on the speedometer?
2. A cheetah can maintain a constant speed of 25 m/s. At that rate, how far will it travel in 10 seconds? In 1 minute?



3. You and a friend each drive 50.0 km. You travel at 90.0 km/h. Your friend travels at 95.0 km/h. How long will your friend have to wait for you at the end of the trip?

4. Suppose you drop a stone off a very tall building as shown below:



- a. How fast is the stone falling after 3s?

- b. How long does it take the stone to fall 75m?