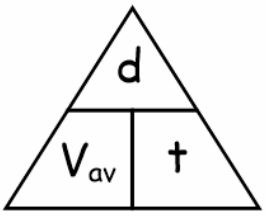
# Average Speed Questions (Extra Practice)




1. d = 14 km t = 2.7 h v = ?
2. v = 14.9 meters/sec d = 30 meters t = ?
3. v = 8.2 m/s d = 6.0 km t = ? (answer in seconds)
4. t = 122 s v = 3.4 m/s d = ?

5. A high school athlete runs 1.00 x $10^2$ m in 12.20 seconds. What is the speed in m/s and km/hr?
6. A person walks 13km in 2.0 h. What is the person's average speed in km/h and m/s?

7. Using the data from the table to the right, during what one-second time interval is the car moving slowest? Moving fastest?
8. Using the data in the table to the right, find the average speed of the car in the time interval between 0.0 and 2.0 seconds.
9. Suppose a car travels at a constant 1.0 x $10^1$ m/s. How far would it move in 1 h? in 1 min? in 1 ms? In 1 μs? in 1 ns?

| Clock readings, t, in seconds | Position, d, in meters |
|---|---|
| 0.0 | 30 |
| 1.0 | 30 |
| 2.0 | 35 |
| 3.0 | 45 |
| 4.0 | 60 |
| 5.0 | 70 |

10. A train leaves the station at the 0.0m marker traveling with a constant speed of 36.0 m/s.
    a. How many seconds later will the train pass the 1620.0-m marker?
    b. What is the speed of the train in km/h?
11. Which of the motions described below are nonuniform? Explain your choices.
    a. A rubber stopper is dropped from your raised hand to the floor.
    b. A car is travelling at a steady rate of 85 km/h due west.
    c. A rocket begins rising from the launch pad.
    d. A motorcycle rider applies the brakes to come to a stop.