

## Average Speed Problems

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

1. A world class sprinter runs 100 meters in 9.89 seconds. What is his average speed?
2. A sailboat is traveling north at 15 mi/hr. How far will it go in 3.5 hours?
3. A train traveling north at 73 mi/hr arrives at its destination in 3 hours. How far has the train gone?
4. You are driving from Bloomington to a suburb of Chicago 130 miles away. If you arrive in 2.5 hours, what is your average speed?
5. A car travels 4,500 km in 55 hours. What is the car's average speed?
6. A marathon runner runs 26 miles in  $\frac{3}{4}$  hours. What is the runners average speed?

7. A caterpillar travels across the length of a 2.00 meter porch in 6.5 minutes. What is the average speed of the caterpillar in m/s?
  
  
  
  
  
  
  
  
  
  
8. A hiker is at the bottom of a canyon facing the canyon wall closest to her. She is 280.5 meters from the wall and the sound of her voice travels at 340 m/s at that location. How long after she shouts will she hear her echo?
  
  
  
  
  
  
  
  
  
  
9. A motorist traveling on a straight stretch of open highway sets his cruise control at 90 km/hr. How far will he travel in 15 minutes?
  
  
  
  
  
  
  
  
  
  
10. A woman from Pasadena makes a trip to a nearby shopping mall that is located 40 miles from her home. On the trip to the mall she averages 80 mi/hr but gets a speeding ticket upon her arrival. On the return trip she averages just 40 mi/hr. what was her average speed for the entire trip?
  
  
  
  
  
  
  
  
  
  
11. A cross country race car driver sets out on a 100 mile race. At the halfway marker (50 miles), her pit crew radios that she has averaged only 50 mi/hr. How fast must she drive over the remaining distance in order to average 100 mi/hr for the entire race?