

Name: _____

Date: _____

Speed Machine Worksheets Answers



1. Light and radio waves travel through a vacuum in a straight line at a speed of very nearly 3.00×10^8 m/s. How far is light year (the distance light travels in a year)? **Answer: 9.50×10^{15} m.**
2. A runner makes one lap around a 200 m track in a time of 25.0 s. What was the runner's average speed?
Answer: 8.0 m/s
3. A motorist travels 406 km during a 7.0 hr period. What was the average speed in km/hr and m/s?
Answers: 58 km/hr, 16 m/s.
4. A bullet is shot from a rifle with a speed of 720 m/s. What time is required for the bullet to strike a target 3240 m away? **Answer: 4.5s.**
5. Light from the sun reaches the earth in 8.3 minutes. The speed of light is 3.0×10^8 m/s. In kilometers, how far is the earth from the sun? **Answer: 1.5×10^8 km.**