

Physics

Name _____

Date _____

Linear Motion, Velocity, Worksheet 1

Solve the following problems

$$d = v/t$$

$$\Delta v = v_f - v_i$$

1. A high school athlete runs 1.00×10^3 m in 12.20 s. What is the velocity in m/s and km/h?
2. A person walks 13 km in 2.0 h. What is the person's average velocity in km/h and m/s?
3. Light from the sun reaches Earth in 8.3 min. The velocity of light is 3.00×10^8 m/s. How far is Earth from the sun?
4. You and a friend each drive 50. km. You travel at 90. km/h, your friend at 95 km/h. How long will your friend wait for you at the end of the trip?
5. Ann is driving down a street at 55 km/h. Suddenly a child runs into the street. If it takes Ann 0.75 s to react and apply the brakes, how many meters will she have moved before she begins to slow down.