PHYSICS IN SCIENCE 1206

AVERAGE SPEED EQUATIONS

Name: _____

Find the average speed for the following.

1.   Julie jogs to school a total distance of 5.2km. If the trip takes her 0.84 h, what is her average speed?

2. Josh skates to school, a total distance of 4.5 km. The total journey takes him 0.62 h. What is Josh's average speed during the trip?

3. If Noah and Michael Hike the Trans Canada Trail for 5.0 h and cover 42 km, what is the average speed for the trip?

4. Ms. Blackmore's car leave Foxtrap and travels to Longpond, a total of 2 km in 0.100 h. What is her speed? Is this speed more or less than the speed limit in the area.

Find the distance for the following equations.

1. Kayla drives her car at an average speed of 65km/h in a time of 1.5 h. How far does she travel in this time?

2. Mitchel walked for 2.1 h along part of the Trans Canada Trail at a speed of 3.6 km/h. What distance did Mitchel travel?

3. The cruise control set on Shayne's car is on 80km/h. What distance does the car travel during 3.5 h?

Find the time for the following equations.

1. Jerrett and Jimmy are competing in a 50000 m race. Jerrett can run at 2.5 m/s while Jimmy can run at 1.8 m/s.

a.) How long will it take each person to finish the race?

b.) When Jerrett crosses the finish line, how much time is left for Jimmy to cross?

2. How long would it take Daniel to travel a total distance of 25.0km/h at an average speed of 5.2 km/ h?

b.) How many minutes would this be?

1. How many significant digits are there in the following measurements?

    A.   35070 mm   _____

    B.   21.0400 L   _____

    C.   0.123 kg   _____

2. Change the following measurements to scientific notation:

    A.   65498 cm   _____

    B.   734.5 m   _____

    C.   0.0032832 L   _____

3. Change the following scientific notation measurements to regular measurements:

    A. 1.56×10^4 m   _____

    B. 3.6×10^{-2} m   _____

    C. 7.369×10^{-5} m _____

4. Round off these measurements to the number of significant digits in brackets:

    A.   734.5 (2)   _____

    B.   0.84329 (4)   _____

    C.   88.340 (3)   _____

    D.   25000 (1)   _____

5. Add the following numbers, and round off the answer to the correct number of decimal places.

    A.   1.25 km + 65 km   _____

    B.   1.0025 m - 0.250 m   _____

    C.   1.21 °C + 3.4 °C   _____

6. Multiply the following numbers and round off the answers to the correct number of significant digits.

    A.   2.14 kg x 32.366 kg   _____

    B.   3.894 m ÷ 2.16 s   _____

    C   200 s x 3.58 s   _____

7. Convert the following:

    A.   943000 cm   _____km

    B.   30 005 mm   _____m

    C.   57.62 km   _____ m

    D.   36.23 cm   _____ mm