Unit 2B
Speed and Velocity
Practice Problems

Name:

Date:

Work each of the following problems. SHOW ALL WORK.

1. A car travels a distance of 100 km in 2 hours. What is the average speed of the car (km/h)?

2. An NFL wide receiver prospect runs 40 m in 4.5 seconds. What is the average speed of the wide receiver (m/s)?

3. The average human walks at a speed of 5 km per hour. If your PE teacher asks you to walk for 30 minutes in gym class, how far would you walk (km)?

4. The posted speed limit on the road heading from your house to school is 45 mi/h, which is about 20 m/s. If you live 8 km (8,000 m) from school, how long will it take you to get to school if there is no traffic? Convert your answer to minutes.

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5. A ladybug walks 10 cm forward then 5 cm backward in 20 seconds. What is the average speed of the ladybug?

6. Using the information from the previous question, what is the average velocity of the ladybug?

7. A city bus travels 6 blocks east and 8 blocks north. Each block is 100 m long. If the bus travels this distance in 15 minutes, what is the average speed of the bus (m/s)?

8. Using the information from the previous question, what is the average velocity of the city bus?

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9. A jogger runs 6 km north, 5 km east, then another 4 km north. Her average speed 8 km/h. How long will it take her to complete her run?

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10. Using the information from the previous question, what is her average velocity during this time?

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