

Speed & Velocity

Name: _____

Date: _____

1. Bobby drove his car east for 25 km and then turned around and drove west for 80 km. The whole trip took him 45 minutes. What was his average speed and velocity?

Speed = 2.3 km/min

Velocity = 1.2 km/min west

2. Karli's average velocity was 45 km/h when she drove to her grandmother's house. It took her 1.2 hours. What was her displacement?

54 km

3. A turtle crawls at an average speed of 0.60 m/min. How many minutes would it take the turtle to go 10 meters?

16.7 min

4. A bird flew south at a velocity of 20 km/h for a half hour. Then it turned around and flew north at 25 km/h for 0.75 hours.

a) Calculate the total distance that the bird flew.

28.75 km

b) Calculate the bird's displacement.

8.75 km north

5. A car drove for 40 minutes at an average velocity of 1.2 km/min west. Calculate the displacement of the car.

48 km west

6. Consider your answer to the previous question. Is it possible that the car drove 80 km west and then turned around and went 32 km east in a total of 40 minutes? Explain.

Yes, because the displacement would be 48 km west, which agrees with #5.