Name: _____ Date: _____ Period: _____

**Conversions:** Convert each of the following measurements to the specified unit using dimensional analysis. Show work. Include your answer on the line provided.

1. 123,000 m = ? km _____

2. 45.9 in= ? km _____

3. 9285 m = ? feet _____

4. 42 mi/hr = ? in/sec _____

5. 10 in/sec = ? m/min _____

6. 135 ft = ? km _____

*Turn to the back* →

**Speed and Velocity:** Calculate the requested information. Show work. Include your answer on the line provided.

1. If someone is sprinting and runs 100 meters in 12 seconds, what is the average speed of the sprinter**? Report your answer in in/min.**

Answer: m/s _____

Converted Answer: in/min _____

2. When you are driving at 55 mi/hr on a highway, how far do you travel in 3.0 hours? **Report your answer in feet.**

Answer: miles _____

Converted Answer: feet _____

3. A car travels 1050 miles at 25 mi/hr. How long does it take the car to travel that distance? Answer in **seconds**.

Answer : hours _____

Converted Answer: seconds _____

4. How fast is a car that travels 1000 miles in 4 hours traveling? **Answer in kilometers per minute.**

Answer: mi/hr _____

Answer: km/min _____