MOTION AT CONSTANT RATE

MATH 73

LAST NAME	FIRST NAME	DATE

Solve applications of $s = vt$ by describing the variables and their units of measurement.

1 (1 point)**.** The top speed of a bullet train is 210 km per hour. Find how long it takes to travel 168 km at top speed.

2 (1 point)**.** The average speed of a cheetah is 16 meters per second. Find how far the cheetah can run in 24 seconds at that speed.

3 (1 point)**.** Uri can walk 7 km in 2 hours. Find how fast Uri walks.

4 (1 point)**.** One morning Aristotle starts walking from Athens to Megara, and at the same time Socrates starts on a journey from Megara to Athens. Being younger, Aristotle is walking 1.8 times faster than Socrates. After a 5 hour journey, they meet somewhere in the middle of the way. Find the speed of each traveler if the total distance between Athens and Megara is 42 km.

5 (1 point)**.** Olesya paddled for 3 hours upstream and then for 2 hours downstream. When going downstream, her speed was 10 mph greater than her speed when going upstream. The total distance traveled was 30 miles. How fast did Olesya travel upstream and downstream?