Name $\qquad$
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## Average Speed Problems

Show Your Work: 1) Write formula; 2) plug-in values; 3) correct answer with units Round Answers to second place past decimal.

1. The world speed record on water was set on October 8, 1978 by Ken Warby of Blowering Dam, Australia. If Ken drove his motorboat a distance of 1000.0 m in 7.045 s , how fast was his boat moving?


Answer: $\qquad$
2. Hans stands at the rim of the Grand Canyon and yodels down to the bottom. He hears his yodel echo back from the canyon floor 5.20 s later. Assume that the speed of sound in air is $340.0 \mathrm{~m} / \mathrm{s}$. How deep is the canyon? (Hint: Note that the time is for the sound to travel to the bottom and back.)


Answer: $\qquad$
3. According to the World Flying Disk Federation, on April 8, 2000, Jennifer Griffin of Fredericksburg, Virginia threw a Frisbee for a distance of 138.56 m to capture the women's record. If the Frisbee was thrown horizontally with a speed of $13.0 \mathrm{~m} / \mathrm{s}$, how long did the Frisbee remain aloft?


Answer: $\qquad$
4. It is now 8:59 am, but when the bell rings at 9:00 am Suzette will be late for Science class for the third time this week. She must get from one side of the school to the other by hurrying down three different hallways. She runs down the first hallway, a distance of 35.0 m , at a speed of $3.50 \mathrm{~m} / \mathrm{s}$. The second hallway is filled with students, and she covers its 48.0 m length at an average speed of $1.20 \mathrm{~m} / \mathrm{s}$. The final hallway is empty, and Suzette spring its 60.0 m length at a speed of $5.00 \mathrm{~m} / \mathrm{s}$
a. Determine if Suzette makes it to class on time by finding how many seconds she arrives before or after the bell.


Answer: $\qquad$
b. Draw a distance vs. time graph of her motion.

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