Answer on Question #80021, Physics / Mechanics | Relativity

Question:

Starting in las cruces you drive north to T or C (79 miles) in 68 minutes, then turn around and drive south to El Paso (122 miles) in 98 minutes. Assume north is the positiv direction and that you are driving in a straight line. What is your average velocity? What is your average speed?

Solution:

According to average velocity definition $\langle v \rangle = \frac{79-122}{68+98} = -0.26$ (miles/minute) = -15.5 (miles/hour).

According to average speed definition $\langle s \rangle = \frac{79+122}{68+98} = 1.2$ (miles/minute) = 72.7 (miles/hour).

The answer:

Average velocity $\langle v \rangle = -15.5$ (miles/hour).

Average speed $\langle s \rangle = 72.7$ (miles/hour).

Answer provided by <u>https://www.AssignmentExpert.com</u>