SPH3UI : Physics 11
Velocity/Speed Worksheet

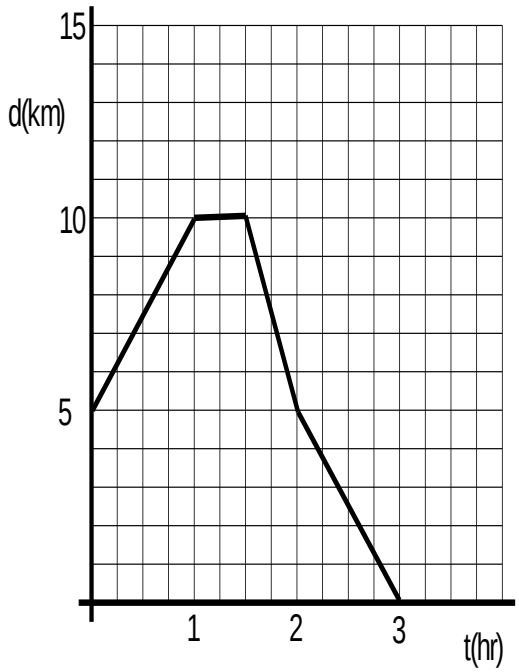
1. A car is observed to travel 133m in 4.50 seconds.

   a) What is its speed in m/s?

   b) What is its speed in km/h?

   c) How long would it take this car to travel 35 km?

2. Given the following graph of the motion of a sailboat find:



   a) the sailboat's speed at t = 0.8 hour _____

   b) the sailboat's speed at t = 2.5 hours _____

   c) the sailboat's velocity at t = 2.5 hours _____

   d) average velocity between t = 0.0 and 2.0 hours _____

   e) average velocity between t = 0.0 and 3.0 hours _____

   f) the position of the sailboat at t = 0.50 hours_____

3) Mr. Marlow drives to WODSS each morning from Waterloo. On an average day it takes 23 minutes at an average speed of 75 km/h to arrive at 8:05. How fast must Mr. M drive if he leaves at 7:50 and he wants to still arrive at 8:05?

4) After morning physics class you hop in your car and drive to London. It takes you 1:05 hours to get there, and your odometer in your car shows you travelled 85 km. After an hour of shopping, you get back in your car and drive back to WODSS to attend your afternoon physics class (you love it so much you have physics class twice per day☺). The journey back takes you 1:18 hours because of afternoon traffic.

a) what was your average speed driving to London(km/hr)?

b) what was your average speed driving back from London(km/hr)?

c) what was your average speed from the time you left WODSS to the time you returned (km/hr)?

d) what was your average velocity for the entire trip (km/hr)?

e) graph this motion on the distance/time graph and velocity/time graphs below