SCIENCE 1206 WORKSHEET
Unit 3 - Motion

Complete each of the following as indicated.

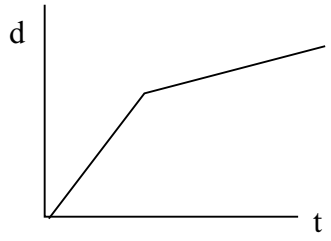
1. A man walks 3.6 km east in 75 minutes and runs 1,5 km west at an average speed of 5.0 km/h. He then walks slowly at 1.0 km/h [W] for 15 minutes.
   A. Calculate the average speed for the motion. (Draw a simple diagram to help you.)

   B. Calculate the average velocity for the motion.

   C. Sketch the following graphs for the motion: distance vs time, speed vs time, displacement vs time, velocity vs time.

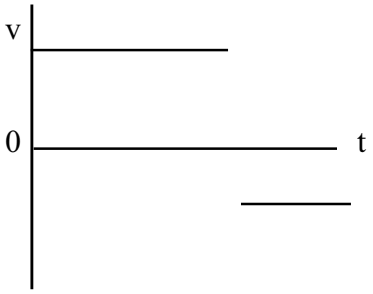
2. Describe the motion indicated by each of the following graphs.

A.

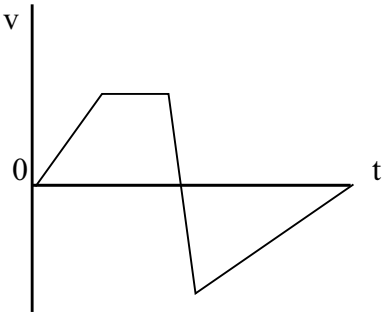


B.

C.



D.



3. Tom leaves point A travelling west at an average speed of 4.0 m/s. 6.0 s later Louis leaves point A along the same path but travelling at 6.0 m/s.
   A. How far apart are Tom and Louis 10 s after Tom left point A ?

   B. How long after Louis leaves would he catch up with Tom ?
   (Use a graph to determine this answer.)