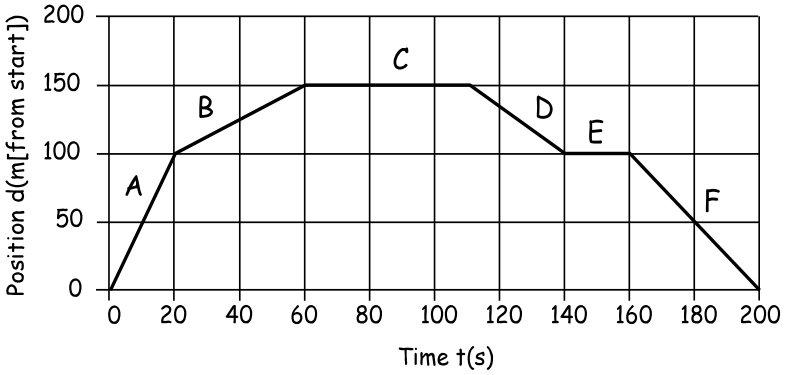
PART A

Answer questions 1 to 4 in the space provided. If more room is needed use the back of this sheet or a separate sheet.

The following graph shows the motion of an inspector on a refrigerator assembly line. Position zero is the start of the assembly line. Use positive to represent directions away from, and negative to represent directions toward , the start.



1. How far is the inspector from the starting point after:

   (a) 20 s _____

   (b) 40 s _____

   (c) 80 s _____

2. When is the inspector at the following positions:

   (a) 50 m _____

   (b) 150 m _____

   (c) 125 m _____

3. What is the inspector's velocity during each of the lettered intervals?

   A _____ D _____

   B _____ E _____

   C _____ F _____

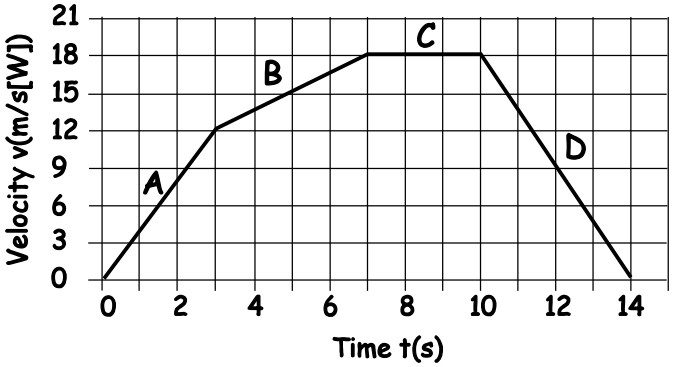
4. For the entire trip what is the inspector's:

   (i) displacement _____ (ii) distance _____ (iii) average velocity _____ (iv) average speed _____

PART B

Answer questions 5 and 6 in the space provided. If more room is needed use the back of this sheet or a separate sheet.

The following shows the velocity-time graph for a dandelion seed blown by the wind. The seed's velocity changes during the four intervals A, B, C, and D.



5. Calculate:

   (a) the acceleration during each interval.

   A _____

   B _____

   C _____

   D _____

   (b) the displacement during each interval.

   A _____

   B _____

   C _____

   D _____

   (c) the final position of the dandelion seed.

   _____

6. What is the seed's (i) speed and (ii) velocity at each of the following times:

   (a) 2 s (i) _____ (ii) _____

   (b) 8 s (i) _____ (ii) _____

   (c) 12 s (i) _____ (ii) _____