PART A

Complete the following statements using the following words:

- constant
- curve
- negative
- positive
- slope (2)
- zero

① The position-time graph for an object with a _____ velocity is a straight line with constant slope.

② The _____ of the position-time graph for an object moving at a constant velocity gives the value of the constant velocity.

③ On a position-time graph
- ☞ a positive slope represents a _____ velocity,
- ☞ a zero slope represents a _____ velocity, and
- ☞ a negative slope represents a _____ velocity.

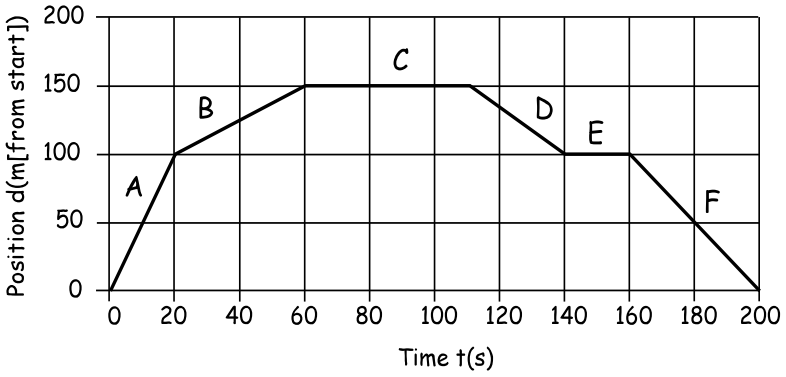
④ The position-time graph for an object that is changing velocity is a _____.

⑤ The average velocity between any two points on a position-time graph = the _____ of the straight line joining the two points.

PART B

Answer questions 1 to 4 below 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 B C D E F

4. For the entire trip what is the inspector's:
   (i) displacement (ii) distance (iii) average velocity (iv) average speed.