PART A

Complete the following statements using the following words: • constant   • negative   • slope (2)

                                                          • curve   • positive   • 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.
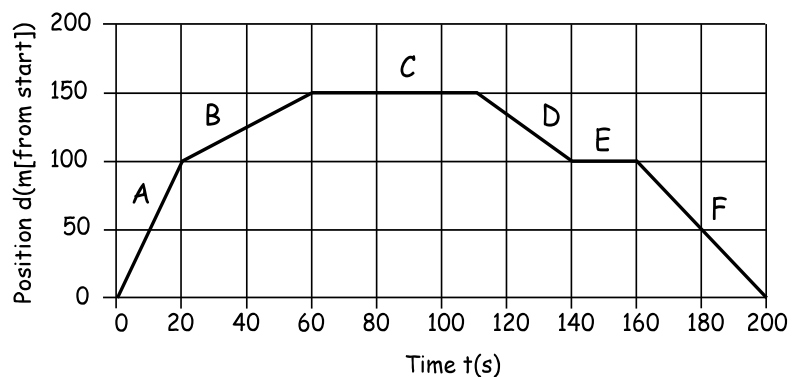
1. How far is the inspector from the starting point after:
   (a) 20 s   (b) 40 s   (c) 80 s

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.