1. A particle P moves in a straight line with simple harmonic motion between two fixed points A and B. The particle performs 2 complete oscillations per second. The midpoint of AB is O and the midpoint of OA is C

The length of AB is 0.6 m.

(a) Find the maximum speed of P

(4)

(b) Find the time taken by P to move directly from O to C

(2)

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Question 1 continued

(Total for Question 1 is 6 marks)