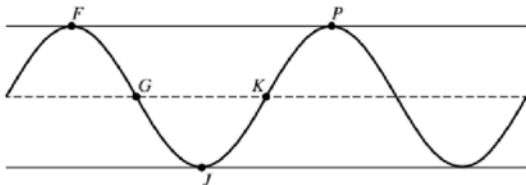


f r q

Part A

13. The graph of h and its dashed midline for two full cycles is shown. Five points, F , G , J , K , and P , are labeled on the graph. No scale is indicated, and no axes are presented.

Determine possible coordinates $(t, h(t))$ for the five points: F , G , J , K , and P .

**Part B**

The function h can be written in the form $h(t) = a \cos(b(t + c)) + d$. Find values of constants a , b , c , and d .

Part C

Refer to the graph of h in part (A). The t -coordinate of J is t_1 , and the t -coordinate of K is t_2 .

- (i) On the interval (t_1, t_2) , which of the following is true about h ?
- h is positive and increasing.
 - h is positive and decreasing.
 - h is negative and increasing.
 - h is negative and decreasing.
- (ii) Describe how the rate of change of h is changing on the interval (t_1, t_2) .

Part A

Select a point value to view scoring criteria, solutions, and/or examples to score the response.



0

1

2