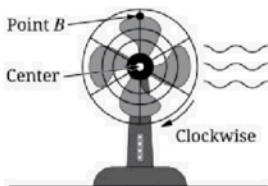


frq



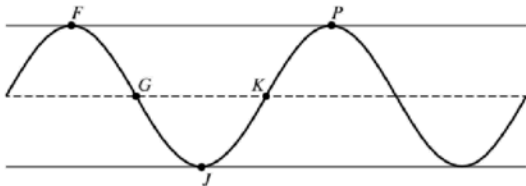
The blades of an electric fan rotate in a clockwise direction and complete 5 rotations every second. Point  $B$  is on the tip of one of the fan blades and is located directly above the center of the fan at time  $t = 0$  seconds, as indicated in the figure. Point  $B$  is 6 inches from the center of the fan. The center of the fan is 20 inches above a level table on which the fan sits. As the fan blades rotate at a constant speed, the distance between  $B$  and the surface of the table periodically decreases and increases.

The sinusoidal function  $h$  models the distance between  $B$  and the surface of the table, in inches, as a function of time  $t$ , in seconds.

#### 14. Part A

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 A

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