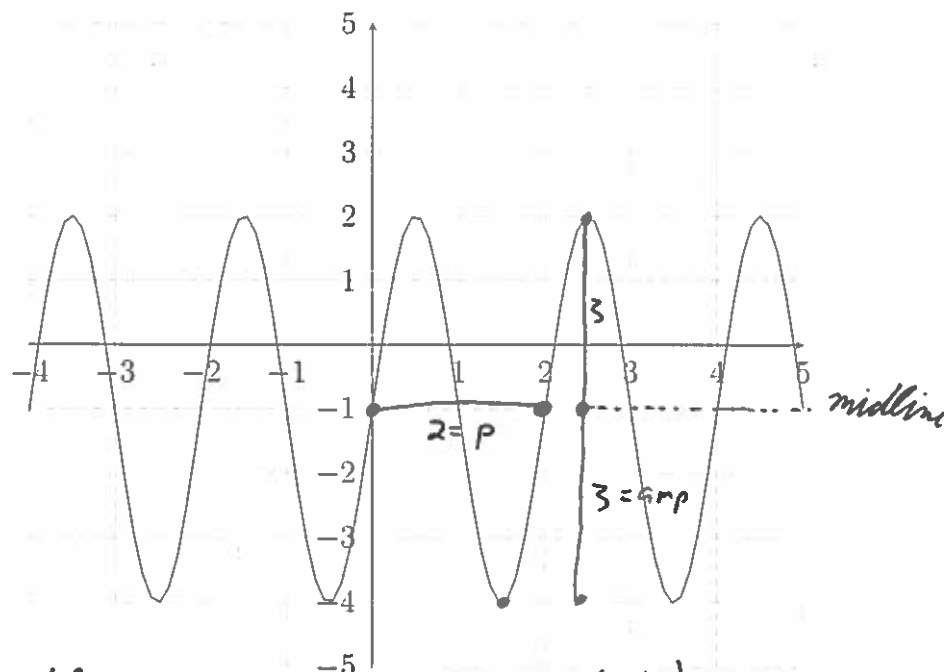


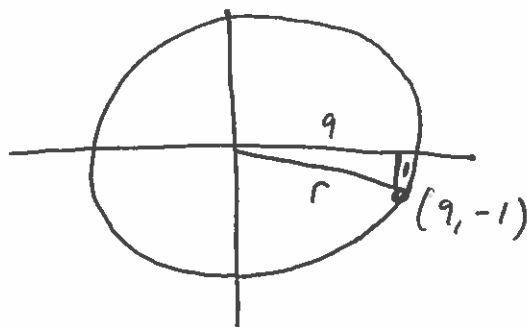
Quick Hit 4

1. Consider the periodic function  $s(x)$  given by graph. What is its period? Amplitude? Midline?



midline :  $y = -1$   $\left( = \frac{2 + (-4)}{2} \right)$   
 amplitude : 3  $\left( = \frac{2 - (-4)}{2} \right)$   
 period : 2

2. The point  $(9, -1)$  lies on a circle centered at the origin. Find the radius of the circle.  
 Hint: Draw a picture and use the Pythagorean Theorem.



$$\begin{aligned} r^2 &= 1^2 + 9^2 \\ &= 82 \\ \rightarrow r &= \sqrt{82} \end{aligned}$$