

## Question

Which of the following Taylor polynomials for  $\sin(x)$  would be most useful for approximating  $\sin(3)$  by hand?

A. 
$$x - \frac{1}{3!}x^3$$
  
B.  $1 - \frac{1}{2!}(x - \frac{\pi}{2})^2$   
C.  $-(x - \pi) + \frac{1}{3!}(x - \pi)^3$   
D.  $\sin(3) - \frac{1}{3!}\sin(3)(x - 3)^3$