

# Taylor Series Exercises

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## 1 Section Two Exercises

#1.  $\sin x \approx 0 + x = x$

#2.  $e^x = \sum_{i=0}^{\infty} \left(\frac{1}{i!}\right) \cdot x^i$

#3.  $\sin x = \frac{x}{1!} - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \frac{x^9}{9!} + \dots$

## 2 Section Three Exercises