

March 27, 2026

- 1 Use the definition of Taylor series to find the Taylor series, centered at c , for the function.

$$f(x) = e^x, c = 1$$

- 2 Find a power series for the function, centered at c .

$$g(x) = \frac{3}{2x - 1}, \quad c = 2.$$

- 3 Find the Maclaurin series for the function. Use the table of power series for elementary functions on page 674.

$$g(x) = e^x \cos(x).$$