SECTION 6.3: TAYLOR AND MACLAURIN SERIES (A FIRST LOOK)

(1) Definitions

If $f(x)$ has derivatives of all orders at $x = a$, then the **Taylor series** for $f(x)$ at $x = a$ is

The Taylor series where $a = 0$, is called the **Maclaurin series**:

(2) Find the Taylor series for $y = \ln(x)$ at $x = 1$.