

## 9.10 Taylor and Maclaurin Series

Name:

Date: July 30, 2015

**P 2.** Find the Maclaurin series of  $f(x) = e^{-4x}$ .

**P 4.** Find the Taylor series of  $f(x) = \sin x$  centered at  $\pi/4$ .

**P 6.** Find the Taylor series of  $f(x) = 1/(1 - x)$  centered at 2.

**P 8.** Find the Taylor series of  $f(x) = e^x$  centered at 1.

**P 9.** Find the Maclaurin series of  $f(x) = \sin 3x$ .

**P 60.** Use series representation to find the limit.

$$\lim_{x \rightarrow 0} \frac{e^x - 1}{x}$$