

QUIZ 10 SPRING 2009 MAT 127 LECTURE 1

Name:

SB ID:

Find the Taylor series for  $f(x)$  centered at the given value of  $a$ , and find the corresponding radius of convergence. Answers without justification will get no partial credit.

1.

$$f(x) = \ln x, \quad a = 10$$

2.

$$f(x) = \frac{1}{x}, \quad a = 5$$

3. Find Maclaurin series for  $f(x) = x \cos 4x$ .