

## MATH 112-04 QUIZ 6

SURNAME / NAME:

ID:

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**Problem 1.** Determine whether each of the following series is convergent or divergent. State clearly the name and the conditions of the test you are using.

$$(a) \sum_{n=1}^{\infty} e^{-n} n^3, \quad (b) \sum_{n=2}^{\infty} \frac{1}{n\sqrt{n - \sin n}}, \quad (c) \sum_{n=1}^{\infty} \frac{\sqrt[n]{3}}{n \ln \left(1 + \frac{1}{n}\right)}.$$