QUIZ 5 SPRING 2009 MAT 127 LECTURE 1

Name: SB ID:

1. Find the following limits:

(a)

$$\lim_{n \to \infty} \frac{n^2}{\sqrt{n^4 - 1}}$$

(b)

$$\lim_{n \to \infty} \frac{\ln n}{\sqrt{n}}$$

2. Determine whether the following series is convergent or divergent. If convergent, find the sum of the series.

$$\sum_{n=1}^{\infty} \frac{3+2^n}{4^n}$$