Math 126: Calculus II   Name:_____

Quiz 6   *October 12, 1999*   Section:_____

1. Evaluate

$$\int_{-\infty}^{\infty} \frac{x}{(x^2 + 4)^{3/2}} \, dx$$

carefully **showing your work** and **all** important steps.

2. Find the limit of the sequence

$$a_n = \sqrt[n]{n^2 + n} + \frac{n^2}{2^n} + \frac{(\ln n)^3}{\sqrt{n}}$$

carefully **showing your work** and **all** important steps.