

Quiz 6

Math 253

Name:

Directions: Determine whether the series is convergent or divergent. Clearly show your work and say what techniques you used. If it is convergent write as much information as you can about the limit.

1. [3] $\sum_{n=1}^{\infty} \frac{\cos^2 n}{n^2 + 1}$

2. [4] $\sum_{n=1}^{\infty} \left(\frac{3}{n(n+1)} + \frac{1}{2^n} \right)$

3. [3] $\sum_{n=2}^{\infty} \frac{1}{n \ln n}$