

SUPERQUIZ SPRING 2009 MAT 127 LECTURE 1

Name:

SB ID:

Determine whether the following series is convergent or divergent. Answers without proper justification will get no partial credit.

1.

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

2.

$$\sum_{n=2}^{\infty} \frac{1}{\sqrt{n}(\sqrt{n}-1)}$$

3.

$$\sum_{n=2}^{\infty} \frac{1}{n(\ln n)^2}$$

4.

$$\sum_{n=1}^{\infty} \frac{(-1)^{n-1}}{\sqrt[3]{n}}$$

5.

$$\sum_{n=1}^{\infty} \frac{n!}{e^n}$$

6.

$$\sum_{n=1}^{\infty} \frac{n^{10}}{2^n}$$