

MA 122: Reading Assignment 5

Read Section 9.3 through Example 1 and Section 9.4 through Example 2

- (1) Does the following series converge or diverge? Why?

$$\sum_{i=1}^{\infty} \frac{1}{2^i} + \frac{5}{3^i}$$

- (2) Does the following series converge or diverge? Why?

$$\sum_{i=1}^{\infty} 5 + \frac{1}{i^2}$$

- (3) Use the comparison test to show that the following series converges.

$$\sum_{i=1}^{\infty} \frac{1}{(i!)^2}$$