

Name:

Section: 5 6 9 10

1. Find the sum of the geometric series $\sum_{n=1}^{\infty} \frac{(-1)^n}{5^n}$

2. Determine if the following series converge or diverge. You may use techniques of geometric series, telescoping series, p -series, divergence test, and integral test.

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

(b) $\sum_{n=1}^{\infty} \frac{2-n}{3-n}$