

Calculus II, Quiz 2: 10.3, 10.4

**Name:**

Please answer the following questions in the spaces provided. You may not use your textbook, calculator, or notes on this quiz.

1. (6 pts each) Determine whether the following series converge or diverge. If they converge, find their sum. (You don't need to simplify.)

(a) 
$$\sum_{k=0}^{\infty} \frac{2}{3e^k}$$

(b) 
$$\sum_{k=19}^{\infty} \frac{1}{k-18}$$

2. (8 pts) Determine whether the series  $\sum_{k=1}^{\infty} \frac{2k}{k^2+1}$  converges or diverges.