Student ID:

Student Name:

Serial Number:

Math 102, Section 16
Summer 2017, Term 162
Instructions: Show Your Work!

Quiz 5
Version A

1. (4 pts) Find the sum of the series

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

2. (4 pts) Determine whether the following series is convergent or divergent

$$\sum_{n=1}^{\infty} \frac{\sin(2n)}{1+2^n}.$$

3. (4 pts) Determine whether the following series is convergent or divergent

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

Student ID:

Student Name:

Serial Number:

Math 102, Section 38
Summer 2017, Term 162
Instructions: Show Your Work!

Quiz 5
Version B

1. (4 pts) Find the sum of the series

$$\sum_{n=1}^{\infty} \frac{1}{n(n+1)}.$$

2. (4 pts) Determine whether the following series is convergent or divergent

$$\sum_{n=1}^{\infty} \frac{\cos(3n)}{1+(1.2)^n}.$$

3. (4 pts) Determine whether the following series is convergent or divergent

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