

December 29, 2016

QUIZ#5 Math102-sec 05.

Net Time Allowed: 25 minutes

Name:

ID # :

Serial #:

**Exercise1:**(04 points)

Determine whether the series  $\sum_{n=1}^{\infty} \frac{(-1)^{n-1} + 2^n}{3^n}$ , is convergent or divergent. If it is convergent, find its sum.

**solution:**

**Exercise2:**(06 points)

Determine whether the following series converges or diverges:

a)-(04 points)  $\sum_{n=2}^{\infty} \frac{1}{n(\ln n)^2}$

b)-(02 points)  $\sum_{n=1}^{\infty} n \sin \frac{1}{n}$ .