

Math 2260 Quiz 16.5 (Practice)

Name _____

Points will be deducted for untidy or disorganized answers

1. Determine which of the follow series converge, and which diverge. Give reasons for your answer.

(a)

$$\sum_{n=1}^{\infty} \sin(n^{-2})$$

(b)

$$\sum_{n=1}^{\infty} \left(1 + \frac{5}{n}\right)^n$$

(c)

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

(d)

$$\sum_{n=1}^{\infty} \frac{3^n}{n^5}$$

(e)

$$\sum_{n=1}^{\infty} \frac{\ln n}{e^n}$$