Quiz 15

Remember to attempt the quiz in the normal testing environment. This quiz should take 10 minutes. Don't forget to show your work for yourself. Make sure you read the questions carefully.

Question 1

Determine if the following infinite series converges. If it converges, then find its sum.

$$\sum_{k=1}^{\infty} \frac{5+3^k}{4^k}$$

Question 2

Determine whether each of the following are convergent or divergent (Hint: Use either the divergence test or the integral test for each)

(a)

$$\sum_{k=3}^{\infty} \frac{11k}{\ln(13k)}$$

(b)

$$\sum_{m=1}^{\infty} \frac{4m^3}{m^4+9}$$

(c)

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