

Series Review

What's the form? And when does it converge?

1) Geometric Series \sum

2) P-Series \sum

3) Harmonic Series \sum

4) Alternating Harmonic Series \sum

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

TESTS

nth Term Test

Order Comparison Test (OCT)

Integral Test

Alternating Series Test

Error Bounding

★Ratio Test

7) Power Series

$$\frac{1}{1-x} =$$

converges over

$$e^x =$$

converges over _____

$$\sin x =$$

$$\cos x =$$

 $\tan^{-1}(x)$ (how to obtain?)

$$e^{-x^2} \quad (\text{how to obtain?})$$

$$\int e^{-x^2} dx \quad (\underline{\text{NO}} \text{ integration techniques for this integral!})$$