

Quiz 6 not quiz 7
Due November 9, 2015

Test the series for convergence or divergence.



Name the test used, and support your conclusion.



Whenever possible, find the sum if convergent.

$$\sum_{n=1}^{\infty} \frac{n^2}{n^4 + 1}$$

*Test :**Apply test / reasoning :**Converge / diverge :**Sum, if possible :*

$$\sum_{n=0}^{\infty} \frac{2^n}{n!}$$

*Test :**Apply test / reasoning :**Converge / diverge :**Sum, if possible :*

$$\sum_{n=0}^{\infty} (-1)^n \frac{2}{5^n}$$

*Test :**Apply test / reasoning :**Converge / diverge :**Sum, if possible :*

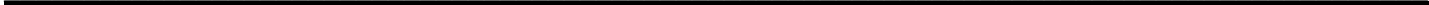
$$\sum_{n=0}^{\infty} (-1)^{n+1} \frac{1}{2n+1}$$

Test :

Apply test / reasoning :

Converge / diverge :

Sum,if possible :



$$\sum_{n=0}^{\infty} \frac{n^2}{2n^2+1}$$

Test :

Apply test / reasoning :

Converge / diverge :

Sum,if possible :



$$1 + \frac{1}{\sqrt{2}} + \frac{1}{\sqrt{3}} + \frac{1}{2} + \frac{1}{\sqrt{5}} + \frac{1}{\sqrt{6}} + \dots$$

Test :

Apply test / reasoning :

Converge / diverge :

Sum,if possible :