SCHOOL OF MATHEMATICS AND PHYSICS

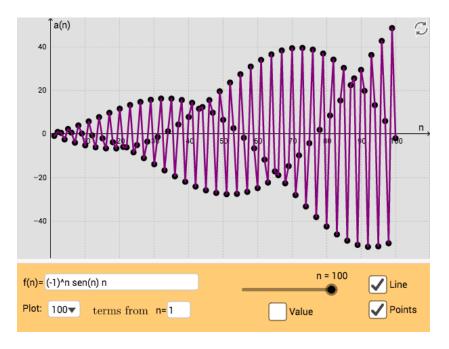
Series

Activity

Determine whether the series is convergent or divergent. If it is convergent, find its sum.

1. $\sum_{n=1}^{\infty} \frac{n-1}{3n-1}$ 2. $\sum_{n=1}^{\infty} \frac{1+2^n}{3^n}$ 3. $\sum_{n=1}^{\infty} \sqrt[n]{2}$ 4. $\sum_{n=1}^{\infty} \arctan(n)$ 5. $\sum_{n=1}^{\infty} \left(\frac{1}{e^n} + \frac{1}{n(n+1)}\right)$

Use the following simulation to explore the series. Click on the link below or type the URL into your browser's address bar.



https://teaching.smp.uq.edu.au/scims/Calculus/Series.html