Symbolab

Series

Convergence Tests

Divergence Test

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

2. $convergence \sum_{n=2}^{\infty} \frac{1}{\left(\ln\left(n\right)\right)^{\frac{1}{n}}}$

3. $convergence \sum_{n=1}^{\infty} \frac{n}{\sqrt{n^2+1}}$

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

5. $convergence \sum_{n=1}^{\infty} \left(-1\right)^{n}\frac{n}{\ln\left(n\right)}$

6. $convergence \sum_{n=1}^{\infty} \frac{n^2}{3n^2+4}$

7. $convergence \sum_{n=1}^{\infty} \left(\frac{2n}{2n-1}\right)^{n}$

8. $convergence \sum_{n=1}^{\infty} \left(-1\right)^{n+1}n$

9. $convergence \sum_{n=1}^{\infty} \left(-1\right)^{n+1}2^{\frac{1}{n}}$

10. $convergence \sum_{n=1}^{\infty} \left(-1\right)^{n+1}\left(1+\frac{1}{n}\right)^{-n}$

Symbolab

Answers

Series

Convergence Tests

Divergence Test

1. diverges
2. diverges
3. diverges
4. diverges
5. diverges
6. diverges
7. diverges
8. diverges
9. diverges
10. diverges