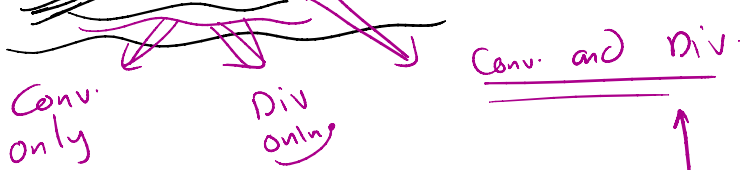


Tests ⇒ Th's



Test 1 (n^{th} partial sum Test) (Conv./Div.) $\sum_{n=1}^{\infty} a_n = a_1 + a_2 + a_3 + \dots$??

✓ Find $S_n = \sum_{k=1}^n a_k = a_1 + a_2 + \dots + a_n$

• If $\lim_{n \rightarrow \infty} S_n = L$ then

$\sum_{n=1}^{\infty} a_n$ converges to L ✓

• If $\lim_{n \rightarrow \infty} S_n$ div. then

$\sum_{n=1}^{\infty} a_n$ div. ✓

Exp (Telescoping Series) Check for Conv./Div.?

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

