

Alternating Series Test



Question

If a_k is positive and decreasing to 0, then the alternating series $\sum_{k=1}^{\infty} (-1)^{k-1} a_k$ converges to some value s . Rank the n^{th} partial sums s_1, s_{100}, s_{329} , the actual sum s , and the number 0, from smallest to greatest.

- A. $s_{100} \leq 0 \leq s \leq s_{329} \leq s_1$
- B. $0 \leq s_{100} \leq s \leq s_{329} \leq s_1$
- C. $0 \leq s_{100} \leq s \leq s_1 \leq s_{329}$
- D. $s_{100} \leq 0 \leq s \leq s_1 \leq s_{329}$