

The Integral Test



Question

Suppose that $a_n = f(n)$ and $b_n = g(n)$. Given that $\int_1^{\infty} f(x) dx = 2$, which of the following must be true?

A. $\sum_{n=1}^{\infty} b_n$ converges.

C. $\int_1^{\infty} h(x) dx$ diverges.

B. $\sum_{n=1}^{\infty} a_n = 2$

D. $\int_1^{\infty} g(x) dx$ diverges.

