

126.

127. Determine whether each of the following series converges or diverges. Give a reason for your answer. If the series converges, tell what it converges to, if that is possible.

A) $\sum_{n=1}^{\infty} \frac{1}{n}$

B) $\sum_{n=1}^{\infty} \frac{4}{n}$

C) $\sum_{n=1}^{\infty} \frac{1}{4n}$

D) $\sum_{n=1}^{\infty} \frac{1}{n^2}$

E) $\sum_{n=1}^{\infty} \frac{4}{n^2}$

F) $\sum_{n=1}^{\infty} 4n^{-1/2}$

128. Determine whether each of the following series converge or diverge. Give a reason for your answer.

A) $\sum_{n=1}^{\infty} \frac{4}{n-4}$

B) $\sum_{n=1}^{\infty} \frac{4}{n^2+4}$

C) $\sum_{n=1}^{\infty} \frac{4}{2^n+4}$

D) $\sum_{n=1}^{\infty} n e^{-n}$

E) $\sum_{n=1}^{\infty} \frac{(\ln n)^3}{n}$