

Q1. Complete the statement by a correct choice. **(Explain your choice)**

If $\{a_n\}$ converges, then $\sum \frac{1}{a_n} \dots$ (Converges, Diverges, Indeterminable)



Q2. Find the sum of $\sum_{n=2}^{\infty} \left(\frac{1}{1-n} + \frac{1}{n} \right)$ if it is convergent or explain if it is not.



Final Ans.

Q1. Complete the statement by a correct choice. (Explain your choice)

Suppose $a_n = f(n)$ where $f(x)$ is a positive, continuous, & decreasing function. If $\int_1^{\infty} f(x)dx = 3$,

then $\left\{\frac{1}{a_n}\right\} \dots$ (Converges, Diverges, Indeterminable)

Q2. Find the sum of $\sum_{n=0}^{\infty} (-1)^{n+1} 2^n \cdot 3^{1-n}$ if it is convergent or explain if it is not.

Final Ans. _____