

#4 There are integers m and n such that $m > 1$ and $n > 1$ and $\frac{1}{m} + \frac{1}{n}$ is an integer.

Proof^o Suppose m and n are some integers, where $m > 1$ and $n > 1$.

Let $\frac{1}{m} + \frac{1}{n}$ equal to some integer.

By example let $m=2$ and $n=2$.

Then $\frac{1}{m} + \frac{1}{n} = \frac{1}{2} + \frac{1}{2} = 1$ by Basic Algebra

the result 1 is an integer.

Q.E.D