2. To examine the truth of the statement "The sum of any five consecutive integers is divisible by 5."

Any 5 consecutive integers can be expressed as $n, n+1, n+2, n+3$ and $n+4$ wherein is any integer i.e $\forall n \in \mathbb{Z}$

Taking their sum.

$$S = n + (n+1) + (n+2) + (n+3) + (n+4)$$

$$= 5n + 10 = 5(n+2)$$

This is clearly divisible by 5 for any integer n.

Therefore, the statement is true.