The sum of any five consecutive integers is divisible by 5

The statement is true

Proof:
Let n be an arbitrary integer, then the five consecutive integers starting from n can be expressed as: $n, n+1, n+2, n+3, n+4$.
Sum of the five integers is:
$n + (n+1) + (n+2) + (n+3) + (n+4) = 5n + 10 = 5(n+2)$
As $n + 2$ is an integer, $5(n + 2)$ is divisible by 5. So for any arbitrary five consecutive integers, their sum is divisible by 5.