3. True.

Proof: For any integer n, n is either an odd or an even number. We will show that the statement holds for both (i.e., holds when n is odd or n is even).
If n is an odd number, n^2 is odd, n^2+n is even, so n^2+n+1 is odd.
If n is an even number, n^2 is even, n^2+n is even, so n^2+n+1 is odd.

So for any integer n, n^2+n+1 is odd. The statement has been proved.