18. **Proof:** Consider any two consecutive integers. Call the smaller one \( n \). By the parity theorem, either \( n \) is even or \( n \) is odd.

**Case 1 (n is even):** In this case \( n = 2k \) for some integer \( k \). Then \( n(n + 1) = 2k(2k + 1) = 2[k(2k + 1)] \). But \( k(2k + 1) \) is an integer (because it is a product of sums of integers), and so \( n(n + 1) \) is even.

**Case 2 (n is odd):** In this case \( n = 2k + 1 \) for some integer \( k \). Then

\[
 n(n + 1) = (2k + 1)[(2k + 1) + 1] = (2k + 1)(2k + 2) = 2[(2k + 1)(k + 1)].
\]

But \( (2k + 1)(k + 1) \) is an integer (because it is a product of sums of integers), and so \( n(n + 1) \) is even.

Hence in either case the product \( n(n + 1) \) is even [as was to be shown].