

5. Check whether 6^n can end with the digit 0 for any natural number n .

$6^1 = 6$ Reason ①

$6^2 = 36$

$6^3 = 216$

6^n unit digit 6

Similarly

Reason ②
 $(6)^n = (2 \times 3)^n = 2^n \times 3^n$
 $\neq 2^m \times 5^n$ so it will never terminate what ever the power raised.

$(12)^n = 2^{2n} \times 3^n \neq 2^m \times 5^n$

