Exponents extensions

Find the units digit of 4^{55} ← units digit is 4

$4^1 = 4$

$4^2 = 16$

$4^3 = 64$

$4^4 = 256$

$4^5 = 1024$

odd – ends in 4

even – ends in 6

Find the units digit of 3^{4287} $4(1071)$

$3^1 = 3$

$3^2 = 9$

$3^3 = 27$

$3^4 = 81$ ✓ , $3^8, 3^{12}, 3^{16}, 3^{20}$ .... mult of 4

$3^5 = 243$

$3^6 = 729$

$4284 + 3$ ends with a 7