

Power play

The last (ones) digit of 3^2 is 9 since $3 \times 3 = 9$

The last (ones) digit of 3^3 is 7 since $3 \times 3 \times 3 = 27$

The last (ones) digit of 3^4 is 1 since $3 \times 3 \times 3 \times 3 = 81$.

What is the ones digit of 3^{2019} ?

Do similar patterns exist in the powers of other whole numbers?

For example, what is the ones digit of each of the following?

$$5^{2019}$$

$$2^{2019}$$

$$4^{2019}$$

$$8^{2019}$$

$$7^{2019}$$