

The square of a number added to the cube of the same number will always be even.

# True

For an odd number

$$\text{Odd} \times \text{Odd} = \text{Odd}$$

$$\text{Odd} \times \text{Odd} \times \text{Odd} = \text{Odd}$$

$$\text{Odd} + \text{Odd} = \text{Even}$$

For an even number

$$\text{Even} \times \text{Even} = \text{Even}$$

$$\text{Even} \times \text{Even} \times \text{Even} = \text{Even}$$

$$\text{Even} + \text{Even} = \text{Even}$$