

- A Natural number x is a perfect square if there exists a natural number y such that $x=y^2$.
- A number ending with 2, 3, 7 or 8 is never a perfect square.
- The number of zeros at the end of a perfect square is never odd.
- Squares of even numbers are always even.
- Squares of odd numbers are always odd.
- Sum of first n natural even numbers= $n(n + 1)$
- Sum of first n natural odd numbers= n^2 .
- The square of a natural number other than 1 is either a multiple of 3 or exceeds a multiple of 3 by 1.
- For any number n greater than 1, $(2n, n^2 - 1, n^2 + 1)$ is a Pythagorean triplet.