ONE PAGE SUMMARY

Academic Education CBSE › Class 8 › Mathematics

A Square and A Cube

Understanding Squares and Cubes in Mathematics

DEFINITION

A square is the product of a number multiplied by itself, while a cube is the product of a number multiplied by itself twice.

KEY CONCEPTS

Square Number

A square number is formed when a number is multiplied by itself, like 3 x 3 = 9.

Cube Number

A cube number is formed when a number is multiplied by itself twice, like 2 x 2 x 2 = 8.

Square Root

The square root of a number is a value that, when multiplied by itself, gives the original number.

Cube Root

The cube root of a number is a value that, when used three times in multiplication, gives the original number.

Visual Representation

Squares can be represented as 2D shapes, while cubes are 3D shapes.

EXAMPLES

→ 4 squared is 16 (4 x 4)

→ 3 cubed is 27 (3 x 3 x 3)

→ The square of 5 is 25.

MEMORY TIPS

★ Remember: Square = 2 sides equal, Cube = 3 dimensions.

★ Think of squares as 'flat' and cubes as 'solid'.

★ Use the phrase 'square it' for squares and 'cube it' for cubes.

COMMON MISTAKES

✗ Confusing squares with cubes.

✗ Forgetting to multiply the number the correct number of times.

✗ Miscalculating square roots and cube roots.

QUICK RECAP

Squares are formed by multiplying a number by itself, while cubes involve multiplying a number three times. Remember the definitions and practice calculating squares and cubes for better understanding.