THREE-DIMENSIONAL SHAPES

A THREE-DIMENSIONAL SHAPES

Definition Solid Geometry _

Solid geometry studies three-dimensional shapes, such as cubes, cylinders, and spheres. The diagrams show examples of these shapes.



Definition Surface —

A surface is the exterior of a three-dimensional shape.

Definition Face -

A face is a flat surface of a three-dimensional shape.

Definition **Edge**

An **edge** is a line segment where two faces meet.

Definition Vertex -

A **vertex** is a point where two or more edges meet.

Ex:



B DRAWING THREE-DIMENSIONAL SHAPES

Method Drawing 3D Shapes .

When drawing 3D shapes, some edges are hidden because they are at the back of the shape. We call these **hidden** edges. To show the shape clearly, we use dotted lines for hidden edges. This helps us see the shape and its depth.



C CLASSIFICATION

efinition Classification					
	Name	Shape	Faces	Edges	Vertices
	Cube		6 (flat)	12	8
	Sphere		1 (curved)	0	0
Sq	quare Pyramid		5 (flat)	8	5
	Cylinder		3 (2 curved, 1 flat)	0	0

D MULTI-VIEW PROJECTION

Definition Multi-view Projection

A **multi-view projection** is a way to draw a 3D shape using 2D views. You show how the shape looks from different sides, like the front, right, and top, to help understand its form.

Ex: Draw the front, right, and top views of this solid.



Answer:





