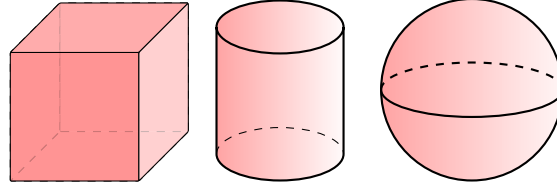


# THREE-DIMENSIONAL SHAPES

## 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.

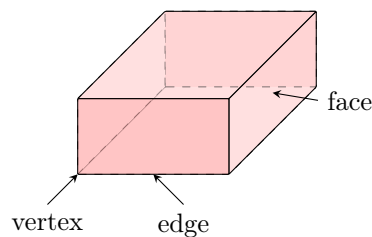
### Definition Edge

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

### Definition Vertex

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

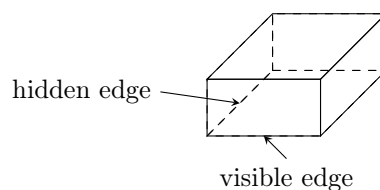
Ex:



## B DRAWING THREE-DIMENSIONAL SHAPES

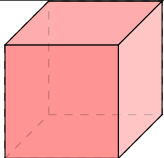
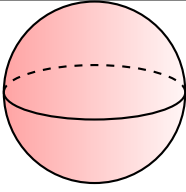
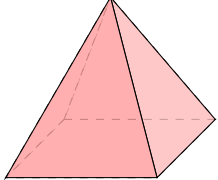
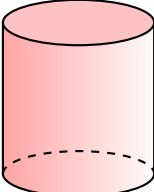
### Method Drawing 3D Shapes

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

### Definition Classification

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