

Solid Modeling

Techniques for Solid Modeling

Step 1	Step 2	Step 3
3D primitive solids, 2D+extruding/revolv ing	Move the primitives into desired location	Use Boolean operations to combine the primitives

Primitives

Box	A solid box or cube
Cone	A solid cone with a circular or elliptical base
Cylinder	A solid cylinder with a circular or elliptical base
Extrude	Create a solid by extruding a closed 2D object
Revolve	Create a solid by revolving a shape about an axis
Sphere	Create a solid sphere
Torus	Create a solid torus
Wedge	Create a solid wedge

Boolean Operations

UNION <i>union</i>	Joins selected solids
SUBTRACT	Subtracts one solid from another
INTERSECT	Create a solid of common volume (interaction) from the selected connected solids

Homework: draw the shape of a desktop computer in 3D.

Provide all necessary features in details.

Due: save your homework on a floppy disk and turn it in next Wednesday.