ASSIGNMENT 3

EXTRUSION

Extrusion is the process of giving a shape thickness and depth by extruding it along a third axis (z) that is perpendicular to the first (x and y). To make an extrusion, choose an element on the work plane, then select Effect / 3D / Extrusion and bevel from the menu. You may rotate the item on its three axis using modifications in the Extrusion and Bevel Options window that displays. Moving the volume in the circular window can also help you work more intuitively.

Perspective:  
Allows you to create perspective distortions.

Extrusion depth:  
Allows you to define the thickness of the volume.

Aspect :  
Allows you to create a full or empty volume.

Bevel (and height):  
Allows you to create a bevel of a desired width.

Area :  
Allows you to define the type of surface as well as the position   
and intensity of the light source as well as the intensity of the   
ambient light.

Surface/texture:  
Allows you to apply a graphic symbol to surfaces.

REVOLUTION

The revolution involves constructing a 3D volume from a 2D shape by extending a path by rotating the shape on the y axis rather than giving it thickness.

As with extruded volumes, you can change the angles after you've created the volume. To make a 3D volume in revolution, first sketch half of an object, then select EFFECTS / 3D / REVOLUTION from the menu. Choose left edge or right edge in the Revolve portion of the Revolve Options window, depending on the path you created.

Angle:  
Allows you to create a volume from a partial or complete revolution.

Offset :  
Allows you to increase the diameter of the volume.

Surface :  
Allows you to define the type of surface, the light intensity   
of the directional source and ambient light, the intensity and   
size of highlights, gradation steps, shade color, etc.

Texture:  
Allows a symbol to be applied to the surfaces of the volume.

Rotation:  
To simulate the rotation of a 2D object, choose in the menu   
EFFECTS / 3D / ROTATION. and adjust the angle settings   
as if it were a 3D volume.