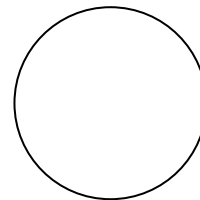


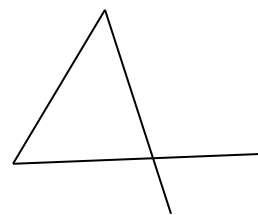
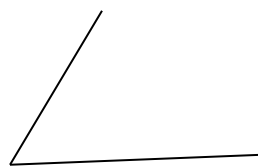
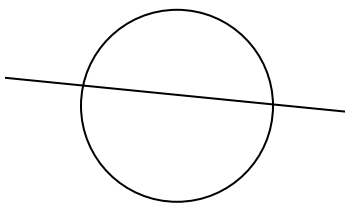
CAD Vocabulary

- 1. Workplane** - a *flat surface* or infinite plane onto which a sketch is created.
- 2. Sketch** - a 2-Dimensional Engineering *drawing*.
- 3. Dimension** - length of a line, degrees of angle or distance/angle of an assembly relationship
- 4. Valid Profile** – A sketch that represents a closed loop of lines.

Valid Profiles:

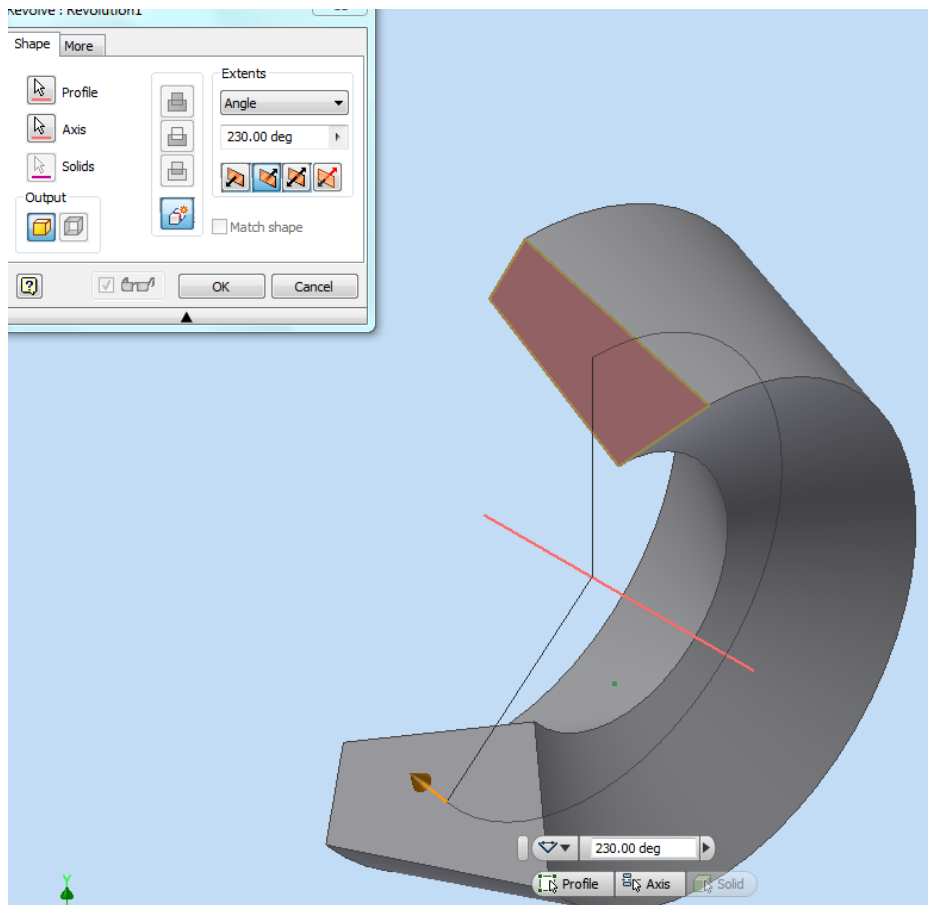


Invalid Profiles:

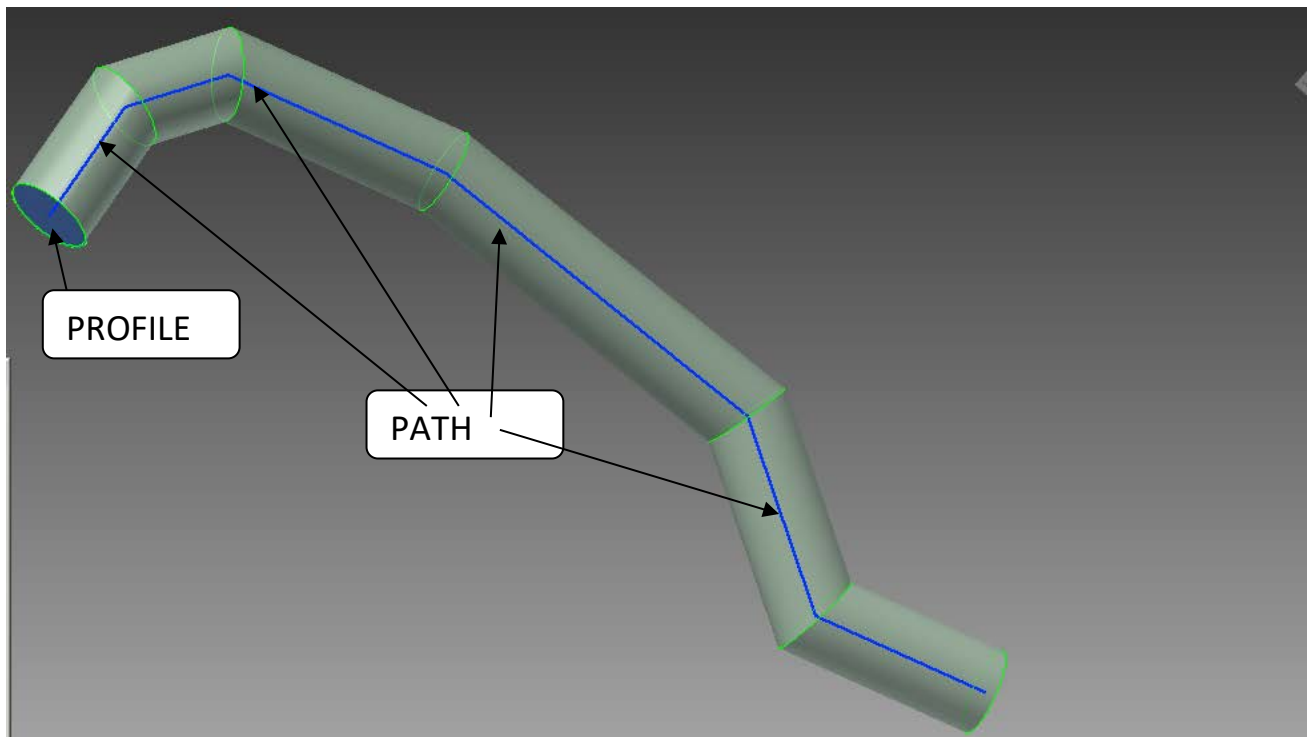


5. **Extrusion** - Adding or subtracting (*Joining* or *Cutting*) material from a 3-D design.
6. **Project File and Folder** – The Parts and Assemblies contained in an Inventor project. **You must have a unique Project Folder for each PROJECT!!**
7. **Constraint** – Placing a restricting condition on a line, angle or assembly relationship. The restricting condition can be a *Length, Fix, Parallel, Perpendicular, Coincident, Collinear, Concentric, Horizontal, Vertical, Tangent, Symmetric, Equal or Smooth*
8. **Feature** –3-Dimensional objects – can be joined or cut from 3-Dimensional designs. *Extrusions, Revolves and Sweeps* are examples of Features.

9. **Revolve** – revolving a **profile** about an **axis** to create a 3-D model.



10. **Sweep** – A solid that is created by moving a **profile** along a **path**.



11. **Crossing Selection** – Any lines that are touched by the crossing will be selected. Crossings are dotted lines.

Crossings are done right to left.

12. **Window Selection** – ONLY lines that are entirely within the window will be selected. Windows are solid lines.

Windows are done left to right.

13. **Verb >Noun** Choose an Action>Choose an Object

14. **Noun>Verb** Choose an Object>Choose an Action

.....Copy, Move, Rotate, Scale – ACTION WORDS –

Verbs

....Lines, Circles – OBJECTS – Nouns