Section Views with SolidWorks
Section Views

- Multi-view drawings may not be adequate to define all features in many types of parts.
  - Some may be obscured
  - Too many hidden lines can cause confusion.
- Section Views are used to reveal interior details.
Section View Drawings

**Definition:** Views of parts with cutouts to show inner details

**Section View Components:**
1. Cutting Plane Line
2. Viewing Direction
3. Cutout View (Section A-A)
Full Section Views

Object cut completely in half by cutting plane perpendicular to the viewing plane to show full interior.

Section A-A
Half Section Views

Half of interior visible by cutting out part of the object

Section B-B
Section Views in SolidWorks

Let's use SolidWorks to add a Section View to the following Drawing.
In the View Layout Tab of a Drawing file there is a “Section View” Button

Full and Half Section Views are available
The dialogue box on the left of the screen will ask you to sketch a line that will represent the 2D cutting plane for your section view.
The section view can now be placed on the drawing by dragging the mouse to the desired location and clicking.

Once the cutting plane is set the dialogue box changes to allow the user more options. The cutting plane viewing direction and letter can be changed.
Section Views Wrap Up

Section Views
1. Show Interior Detail
2. Section View Components
   1. Cutting Plane Line
   2. View Direction
   3. Cutout View
In-Class Problems Section Views with SolidWorks

Instructions:

1. Download the SolidWorks Part file (Section_Views_In-Class_Part.sldprt) from the Class 15 web page and open it in SolidWorks. Open a new, blank OSU_Title_Block.slddrw drawing file.

2. Project the object as a Front View, Top View, Isometric View, and a Front View Shown as a Full Section, as shown in the drawing below.

3. Add all centerlines and text boxes shown.

4. Fill out all of the information required in the Title Block.

5. Print the drawing and hand it in on the due date.