In this activity, you will be assembling models of the Pulley Assembly shown below in order to create two different assembly drawings. You will create an orthographic assembly drawing of the Pulley Assembly as well as an assembly drawing with an exploded pictorial representation. Both drawings will contain identifying balloons and a parts list of all components.

The parts for this assembly can be found on the Pro_E datadisk, in the METBD 111 – Evans – Pulley Assembly Parts folder as shown in the figure below. Note that there are 8 components that are to be copied to a folder on your P-drive.

1. Open a new assembly file in Pro/E. Assemble the components as shown in the figure below. The assembly is symmetrical. The pulley should be centered on the shaft (align datum planes). The bushings should contact the shoulders on the shaft. The angle brackets contact the bushings. The ends of the shaft are threaded in order to receive the hex nuts. The cosmetic threads are not necessary for our purposes and are not shown on any parts. All your components should be fully constrained.

2. Create a three view drawing of the Pulley Assembly. The drawing number is A-111-00X-08A and the title is Pulley Assembly. Use the form "a_horiz_english_bom.frm" for your drawing. This form contains a parts list that automatically fills in with parameters specified in the part files (description and material). The item number and quantity values are assigned by Pro/E. The parts list is a "Table" and its size can be modified by the user. Balloons can also be included automatically in the Table menu.
3. Create an exploded state for the assembly. Your should be similar to the one shown below.

4. Create another assembly drawing of the Pulley Assembly. This is to be drawing is A-111-00X-08B and the title is still Pulley Assembly. Use the same drawing form to include a parts list. Add balloons to your drawing. You may want to experiment and add lines to show the assembly path of the parts, similar to the figure below.

Example Drawing: