EGR 110 Engineering Graphics File: N110IA5

## **Inventor Assignment #5**

## **Reading Assignment:**

Read Chapters 7, 9, and 11 in Parametric Modeling with Autodesk Inventor 2013, by Randy Shih

## **Computer Assignment:**

Create a solid model (a part) of the flanged pipe shown on the following page. Also produce a drawing with front, right, and isometric views as shown. Specifically:

- Create the pipe as a swept feature.
- Add the flanges using extrusions.
- On each flange add one counterbore hole and then use a circular pattern to create the others.
- Create a drawing file using an A-size (portrait) sheet.
- Use the Styles Editor to change the number of digits after the decimal point to 3.
- Retrieve dimensions from the part. Add new dimensions if any are missing or replace dimensions if the retrieved dimensions are not in convenient locations (include all dimensions shown on the following page.) Create the note for the countersunk hole using a *leader*.
- Use good dimensioning style.
- Note that the default centerlines may be too large. You can change them by changing the <u>Global</u> <u>Line Scale</u> as follows:
  - Format Style and Standard Editor
  - Default Standard (ANSI)
  - Global Line Scale: (default is 1.0 reduce for smaller dashes)
  - Add information to the title block including
    - Your name
    - EGR 110 Engineering Graphics
    - Part Description: Flanged Pipe
    - o Date

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- Scale: 1=0.5
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- Print the drawing.



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