HW Assignments for IENG 248L (so far ...)

HW 01: Access the course website and follow the instructions on the Notices page and Materials page to complete this assignment and load the course software.

HW02: Complete *Hands On 2.2*. Also, sketch the following two views of the Boiler Stay (below) on EP paper. Try to scale your drawing so that the smallest features (the three holes) just fit into four adjacent grid squares (center each). Sketch the correct line patterns and line weights for the following line types in your drawings:

- 1.) Visible lines
- 2.) Hidden lines
- 3.) Center lines
- 4.) Dimension, extension, and leader lines
- 5.) And letter the dimensions and notes correctly, one grid box high.

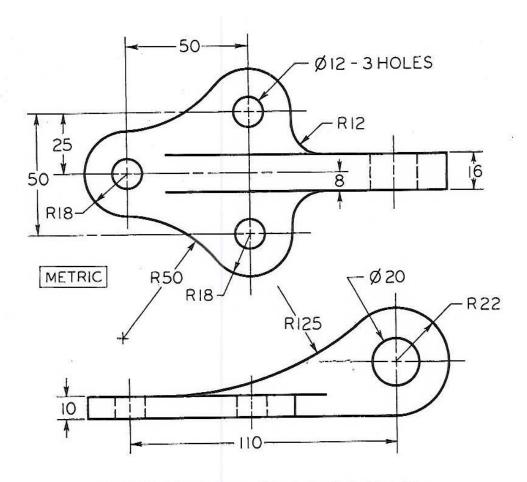


FIGURE 3.30 (Proj. 3.8) Boiler Stay.

HW03: Turn in the following with a cover sheet. (Remember to always sketch the correct line patterns and line weights in drawings for full credit):

- 1.) Sketch the symbol for a third angle projection
- 2.) Complete HO 5.5 and HO 5.6 on the photocopies
- 3.) Draw the following Projects (p.152) two per page:
 - #3, 4, 16, and 22 (note: numbers are below object)
- 4.) Draw the following Projects (p.154) two per page:
 - # 6, and 11 (note: numbers are below object)

See the link on the Schedule page for photocopies handed out in class ... HW 03.

HW04: Turn in the following on EP paper with a cover sheet. (Remember to always sketch the correct line patterns and line weights in drawings for full credit):

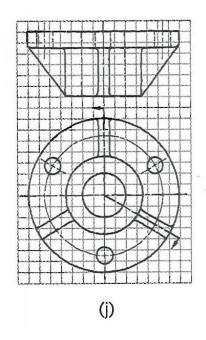
- 1.) Draw the following Exercises (p.207):
 - 5.7, # 4 (note: numbers are above object)
- 2.) Draw the following Exercises (p.210):
 - 5.19 (note: numbers are below object)
- 3.) Draw the following Exercises (p.211):
 - 5.28 (note: numbers are below object)

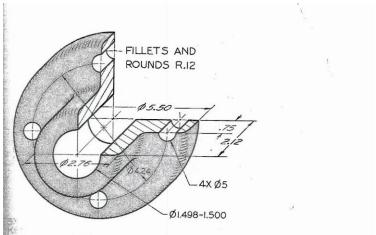
See the link on the Schedule page for photocopies from 5th edition of course text ... HW 04.

HW05: Turn in the following on EP paper with a cover sheet. (Remember to always sketch the correct line patterns and line weights in drawings for full credit):

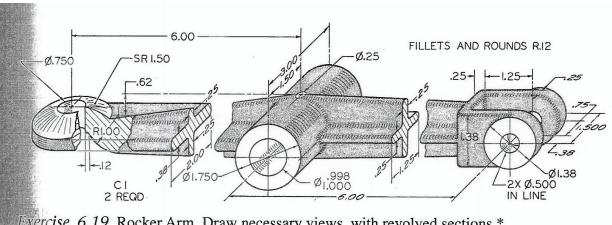
- 1.) Sketch section for 6.4 j only on p. 244.
- 2.) Sketch the necessary views for 6.5, p. 245 (no dimensions necessary)
- 3.) Sketch the necessary views for 6.19, p. 247 (no dimensions necessary); include the (1) broken-out and both (2) revolved sections

See the next page for photocopies from 5th edition of course text ... HW 05.





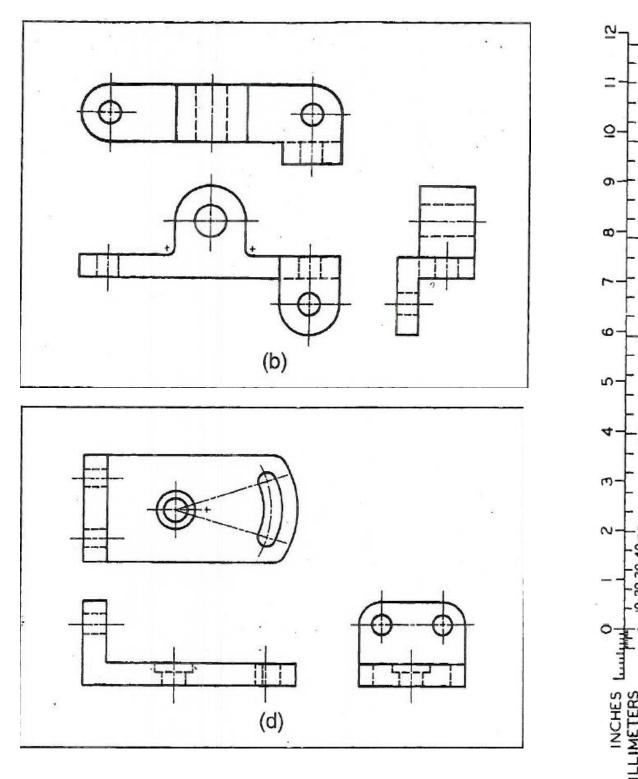
Exercise 6.5 Bearing. Draw necessary views, with full section.*



Exercise 6.19 Rocker Arm. Draw necessary views, with revolved sections.*

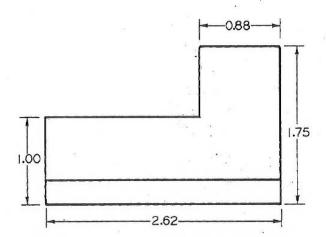
HW06: Turn in the following on two EP paper sheets with the title blocks filled out. (Remember to always sketch the correct line patterns and line weights in drawings for full credit):

Sketch and dimension the necessary views for 9.2 (b) with millimeter dimensions; and 9.2 (d) with inch dimensions, one part per page. (Use attached scale to measure.) From p. 387, text.

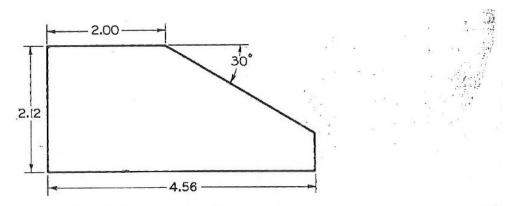


HW07: Turn in the following on two EP paper sheets with the title blocks filled out. (Remember to always sketch the correct line patterns and line weights in drawings for full credit):

Sketch and dimension the two parts below (10.2 and 10.3) using GD&T. From p. 429, text.



Exercise 10.2 Sketch the figure shown above. Use either limit dimensions, bilateral tolerances, or geometric tolerancing to add a hole to the left end of the part, located .50" from the bottom surface and 2" from the right end of the part. The location should be accurate to $\pm .005$ and its size accurate to within $\pm .002$.



Exercise 10.3 Add geometric dimensioning and tolerancing symbols to the drawing to do the following: (a) Control the flateness of the bottom surface to a total tolerance of .001. (b) Control perpendicularity of the left surface and bottom surface to .003. (c) Control the tolerance for the 30° angle to .01.