ME 110 (Fall 2010)

Assignment #6 (Due Monday 3-18-11):

1. Create the following soap dish and submit a hardcopy of the SolidWorks drawing file (see Figure 1).

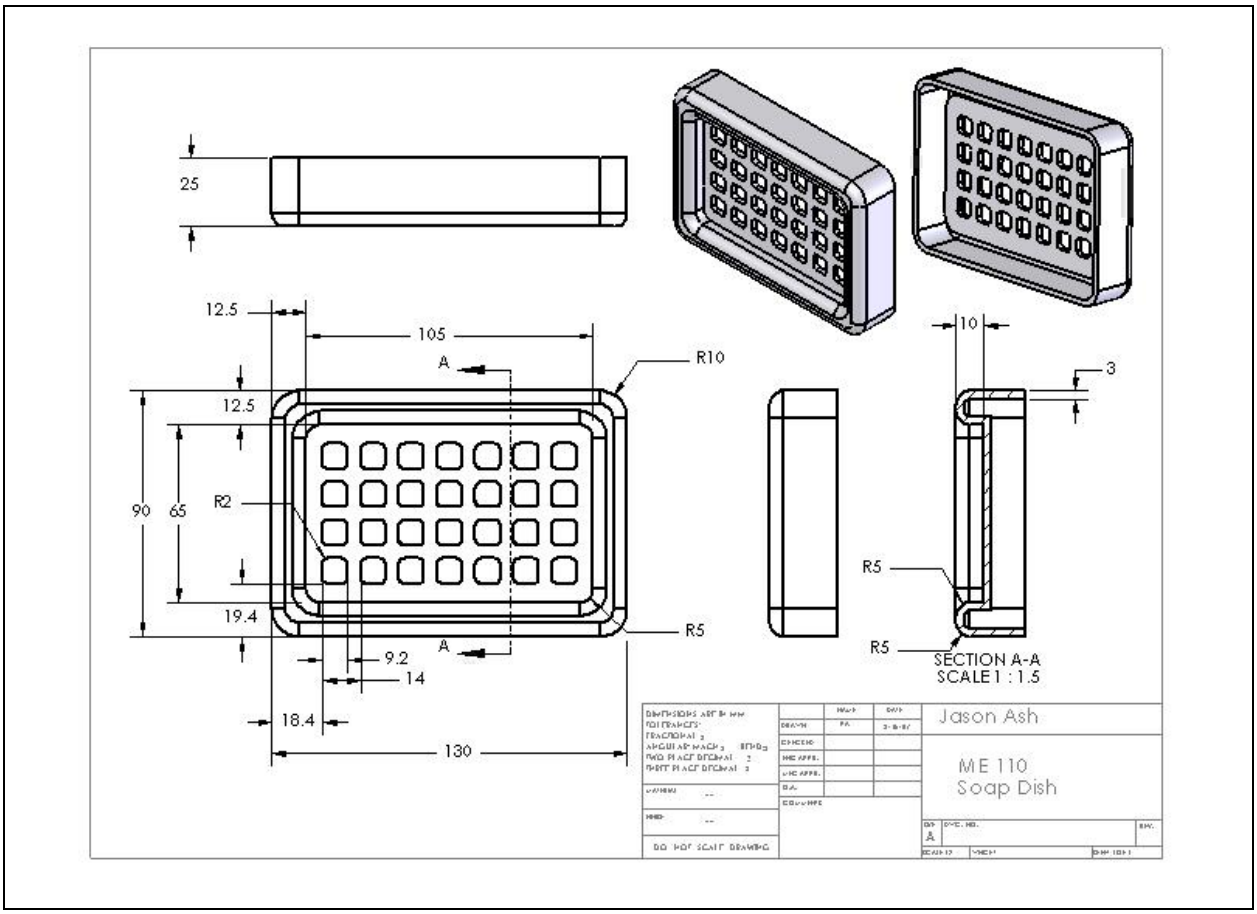

Figure 1. Final drawing to be submitted of soap dish using fillets and linear pattern (dimensioning required)

- Dimensions are in mm
- All fillets are of constant radius with radius defined in the next bullet
- Fillets are 10 mm on outside corners, 5 mm on inside dish corners, and 5 mm on remaining top surface
- The thickness of the soap dish is uniform at 3 mm
- The bottom left hole is 18.4 mm from the left edge and 19.4 mm from the bottom edge
- The holes are 9.2 mm square (w/ 2 mm fillets) and there is a distance of 14 mm between common points
- Include the section view and approximate back isometric view

2. Create the following tinker toy and submit a hardcopy of the SolidWorks drawing file (see Figure 2).

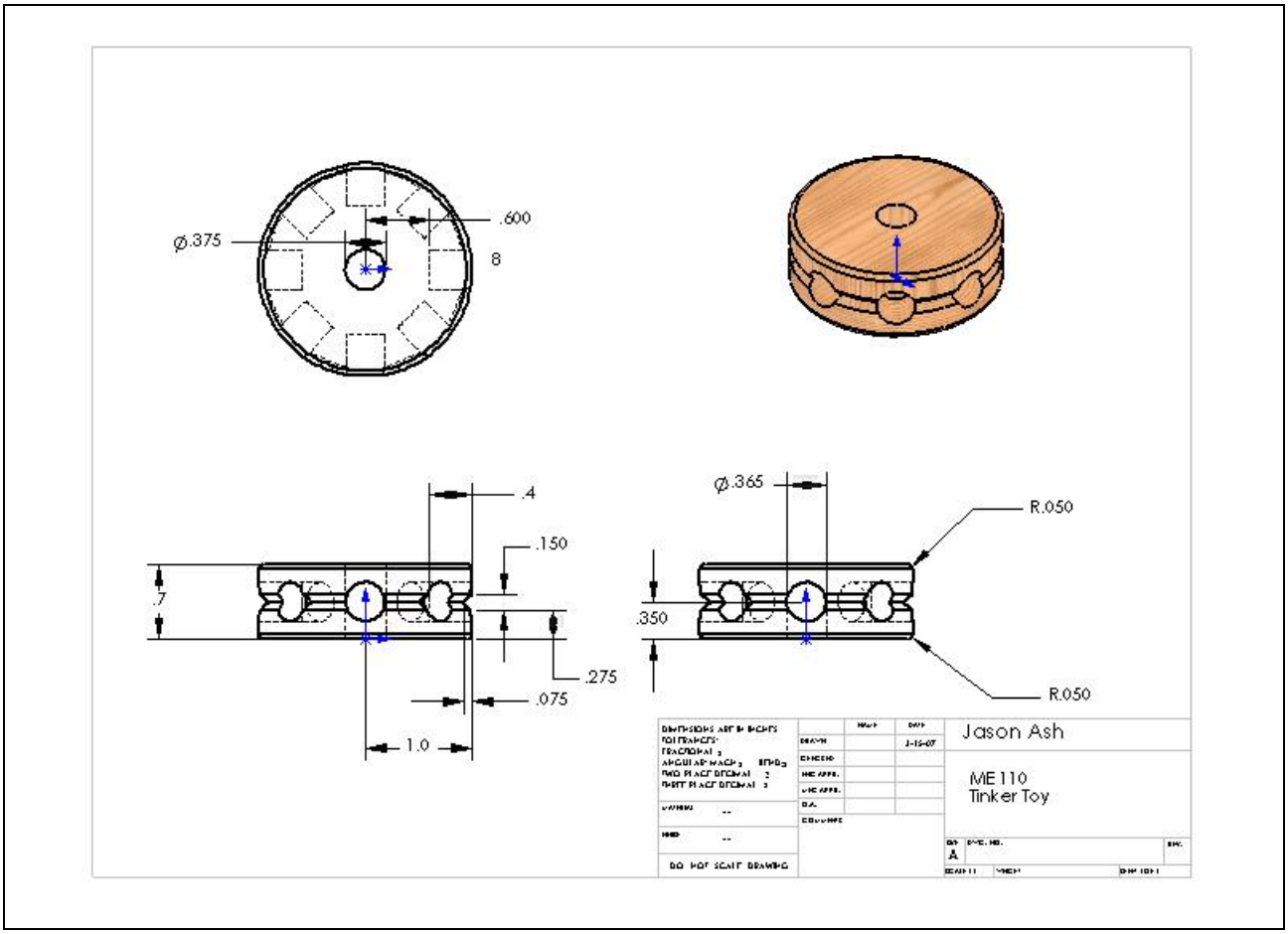

Figure 2. Final drawing to be submitted of tinker toy using circular pattern (dimensioning required)

- Dimensions are in inches
- Eight holes shown in isometric/front view go in a distance of 0.4 inches from outer edge
- The feature cut around the middle is a triangular segment 0.15” high and 0.075” deep. This can either be created in the initial sketch and doing a revolved boss/base, or afterwards by doing a revolved cut.