

ASSIGNMENT 3

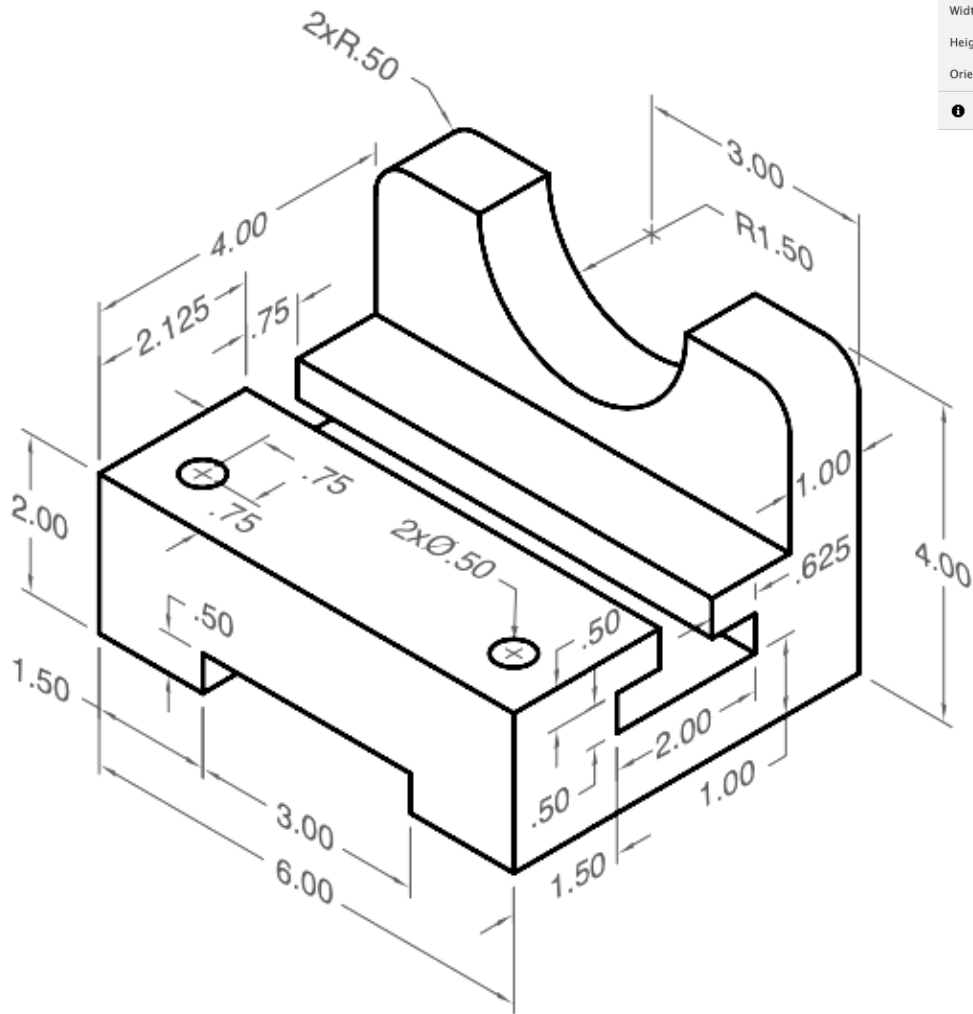
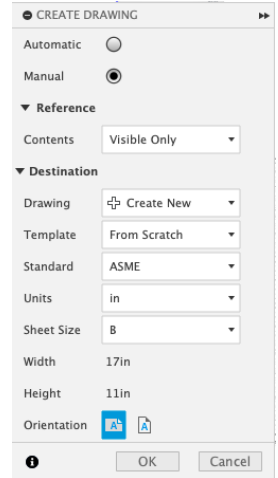
(due Feb 16th @ 11:59pm)

1. Create a solid model and engineering drawings of the following component using Fusion 360.

Use ASME when selecting your drawing standard in F360 and choose Size B (11"x17") drawing size. You may use landscape or portrait (whichever you think is best).

Create your drawing using a 1:2 scale for the orthographic projections, and a 1:3 scale for the isometric view. Dimension your drawing using the dimensioning best practices presented in class. Include the precision as presented in the isometric view below.

Complete the title block and export your drawing as a PDF.



GUIDE (ALL UNITS IN INCHES)

2. The data for total Coffee, Tea, and Cocoa availability in the United States is presented in a table (download the file "ctc.xlsx"). Create a graphic to display the *per-capita* availability in pounds of Total Coffee, Tea, and Cocoa from the years of 1910 to 2015.

What information can you gathered from the chart?

	A	B	C	D	E	F	G
1	Coffee, tea, and cocoa Total Availability (US 1910-2015)					Filename: CTC	
2							
3							
4	Year	U.S. population, July 1 ¹	Coffee, bean equivalent	Tea, dry leaf equivalent	Cocoa, bean equivalent		
5							
6							
7		- Millions -	----- Millions of Pounds -----				
8	1910	92.407	848.0	95.0	114.0		
9	1911	93.863	784.0	102.0	133.0		
10	1912	95.335	1,031.0	98.0	150.0		
11	1913	97.225	872.0	88.0	152.0		
12	1914	99.111	914.0	94.0	167.0		
13	1915	100.546	1,064.0	103.0	190.0		
14	1916	101.961	1,171.0	104.0	234.0		
15	1917	103.414	1,252.0	125.0	377.0		
16	1918	104.550	1,051.0	126.0	342.0		
17	1919	105.063	1,241.0	65.0	366.0		
18	1920	106.461	1,245.0	88.0	310.0		
19	1921	108.538	1,304.0	75.0	294.0		
20	1922	110.049	1,296.0	94.0	334.0		
21	1923	111.947	1,415.0	102.0	387.0		
22	1924	114.109	1,395.0	91.0	372.0		
23	1925	115.829	1,225.0	100.0	359.0		
24	1926	117.397	1,456.0	95.0	424.0		
25	1927	119.035	1,448.0	88.0	398.0		
26	1928	120.509	1,439.0	89.0	353.0		
27	1929	121.767	1,481.0	88.0	484.0		
28	1930	123.188	1,540.0	84.0	367.0		
29	1931	124.149	1,612.0	86.0	420.0		
30	1932	124.949	1,553.0	94.0	403.0		
31	1933	125.690	1,603.0	96.0	435.0		
32	1934	126.485	1,559.0	74.0	435.0		
33	1935	127.362	1,709.0	82.0	600.0		
34	1936	128.181	1,760.0	82.0	644.0		
35	1937	128.961	1,714.0	88.0	507.0		
36	1938	129.969	1,934.0	87.0	452.0		
37	1939	131.028	1,955.0	92.0	598.0		
38	1940	132.122	2,049.0	88.0	612.0		

Note: there is more than one way to display the data! Choose which type of graph you think would be best to display this information. Be sure to use emphasize the data and reduce data ink! Marks will be deducted for not applying best practices.