

ITP 308: Homework 7

Due: March 10, 2021 11:59pm

Setup

We are going to create an advanced assembly. This assembly was part of the CSWA test. Please review the attached drawing. Note that two of the dimensions given are A and B. This question will require you to answer the two following questions as part of your submission.

Materials

Already given for each part

Description

Create the assembly given on the drawing. Set the values for A and B according to the questions.

Question 1 (Multiple Choice)

Given the following values of A and B, what is the center of mass of the assembly as referenced from Coordinate System 1?

A = 150 degrees, B = 60 degrees

- A) X = 1.67 in, Y = 0.22 in, Z = 2.44 in
- B) X = 1.94 in, Y = 0.11 in, Z = 3.01 in
- C) X = 1.79 in, Y = 0.25 in, Z = 2.61 in
- D) X = 2.01 in, Y = 0.24 in, Z = 2.59 in

Question 2 (Open Ended)

Given the following values of A and B, what is the center of mass (in inches) of the assembly as referenced from Coordinate System 1?

A = 110 degrees, B = 70 degrees

Deliverables

Name your assembly:

advancedassembly.sldasm

Compress **ALL** files it into a single zip file named

username_hw7.zip

Where *username* is your USC username

Submit your zip file and write your answers to the questions in the submission text box.

Grading

Description	Points
Assembly	
• Assembly is fully defined	8
• Assembly has correct components	8
Questions	
• Q1 is correct	2
• Q2 is correct (within 1% of actual answer)	2
Total	20