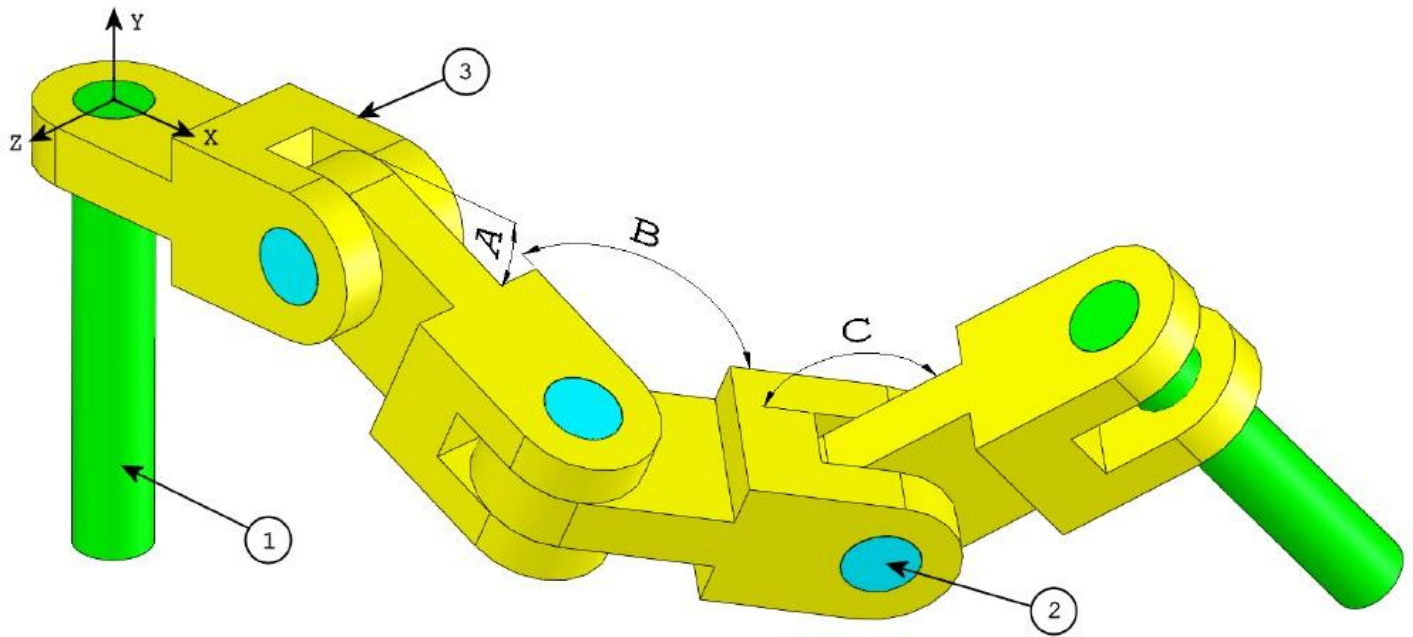


Assembly Modeling

This image is to be used to answer Questions #7 – 8.



7. Build this assembly in SOLIDWORKS (Chain Link Assembly)

- ✓ Download the attached zip file and open it.
- ✓ Save the contained parts and open those parts in SOLIDWORKS. (Note: If SOLIDWORKS prompts "Do you want to proceed with feature recognition?" please click "No".)
- ✓ IMPORTANT: Create the Assembly with respect to the Origin as shown in isometric view. (This is important for calculating the proper Center of Mass)
- ✓ Create the assembly using the following conditions:

1. Pins are mated concentric to chain link holes (no clearance).
2. Pin end faces are coincident to chain link side faces.

Unit system: MMGS (millimeter, gram, second)

Decimal places: 2

Assembly origin: As shown in image

A = 25 degrees

B = 125 degrees

C = 130 degrees

What is the center of mass of the assembly (millimeters)?

Hint: If you don't find an option within 1% of your answer please re-check your assembly.

- a) X = 348.66, Y = -88.48, Z = -91.40
- b) X = 308.53, Y = -109.89, Z = -61.40
- c) X = 298.66, Y = -17.48, Z = -89.22
- d) X = 448.66, Y = -208.48, Z = -34.64

8. Modify the assembly in SOLIDWORKS. (Chain Link Assembly)

Unit system: MMGS (millimeter, gram, second)

Decimal places: 2

Assembly origin: Arbitrary

Using the same assembly created in the previous question modify the following parameters:

A = 30 degrees

B = 115 degrees

C = 135 degrees

What is the center of mass of the assembly (millimeters)?

END OF TEST