# 🛠 Assignment: Drone Frame Design Using SolidWorks/Fusion 360

**Assignment Objective:**

Design a **3D CAD Model of a Drone Frame** using **SolidWorks/Fusion 360**, based on the provided 2D engineering drawings and dimensions.

**Assignment Guidelines:**

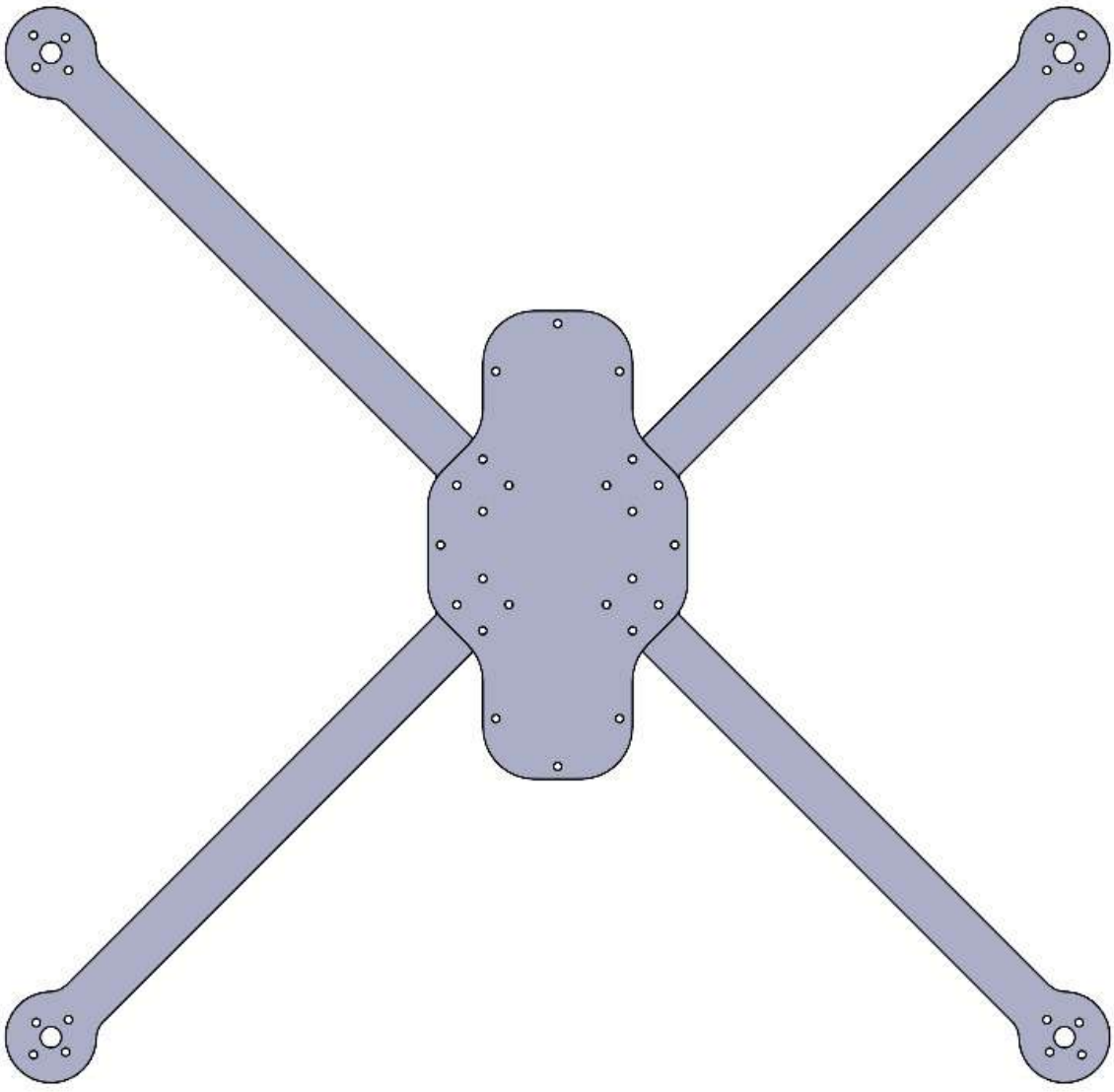
1. **Use SolidWorks Software**/Fusion 360 (as taught during the workshop).
2. Carefully observe the **given 2D drawings** with dimensions.
3. Create a **3D model** of the drone frame **exactly matching** the specifications.
4. Ensure proper use of:
    - Extrude/Boss/Base features
    - Fillet or Chamfer as needed
    - Assembly (if creating a multi-part structure)
5. Name your file as: **YourName_DroneFrame.SLDPRT**

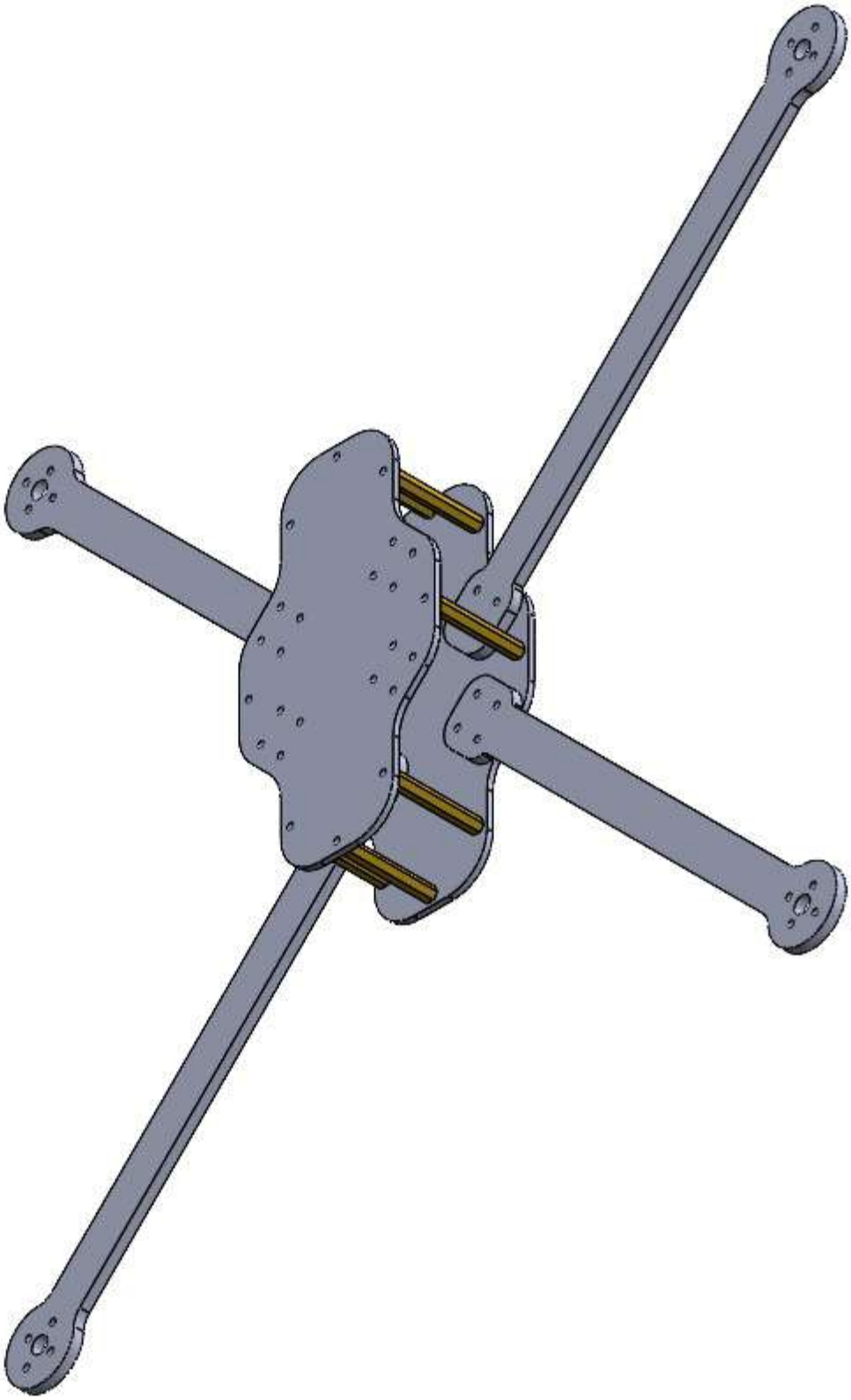
**Note:**

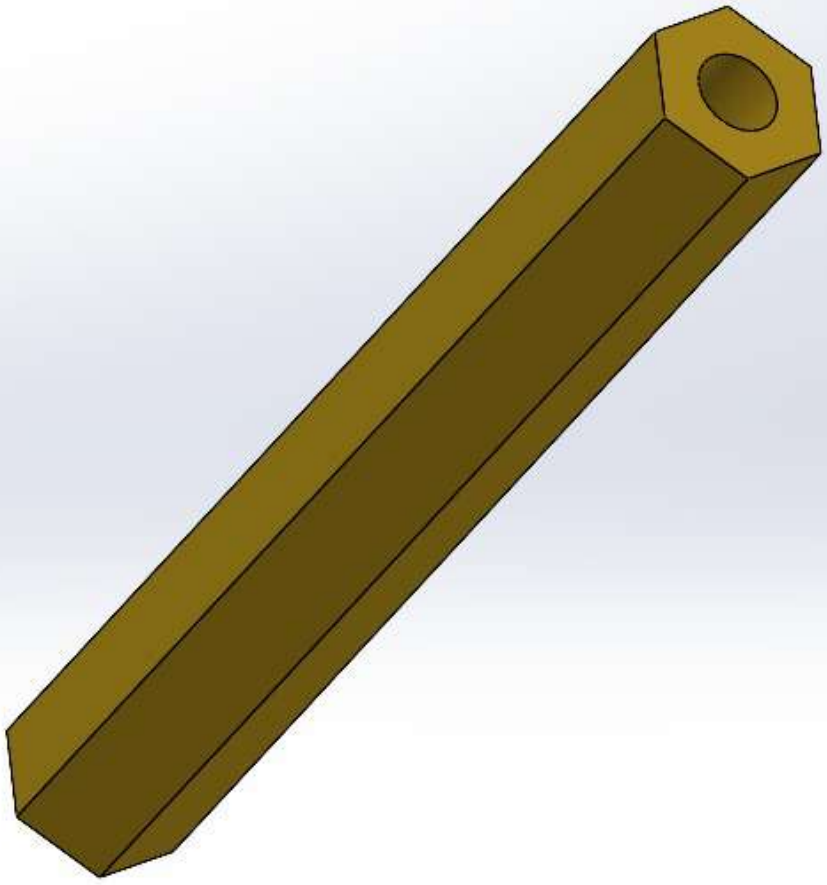
This assignment will help you build your **technical portfolio** and get hands-on experience in **aerostructure CAD design**.

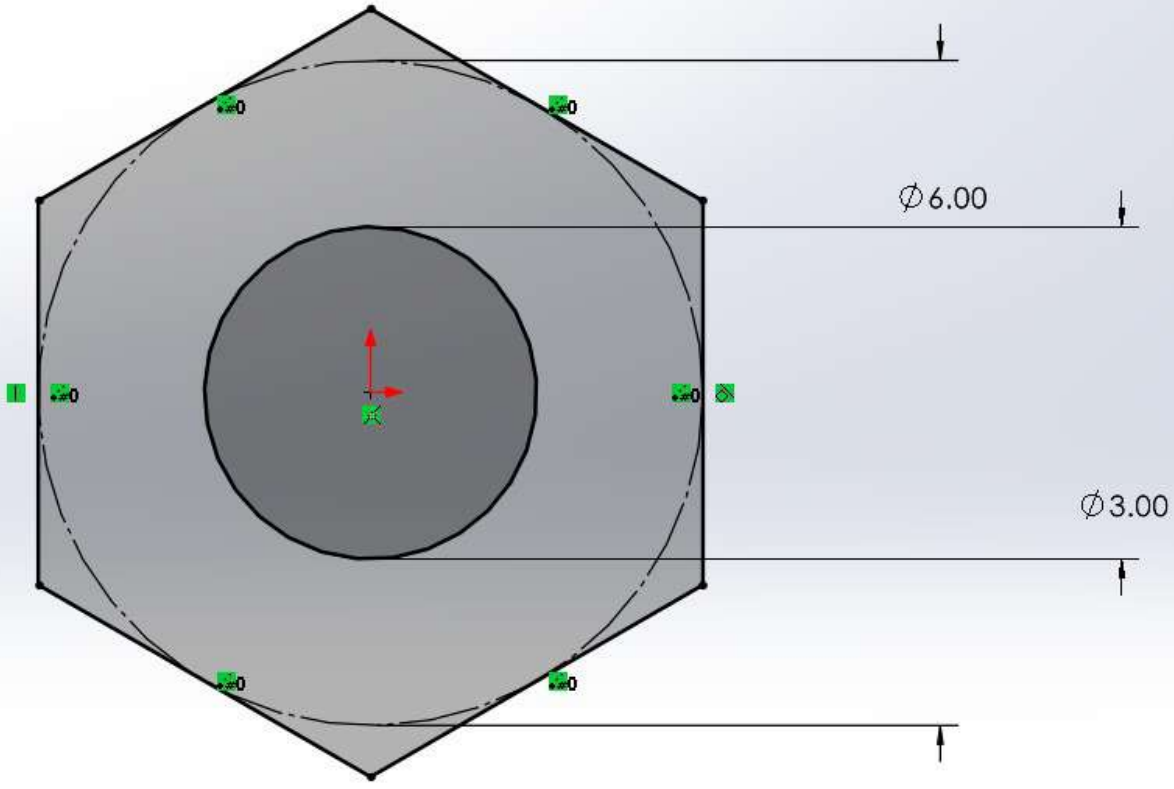
The CAD drawing images are attached below. If you face any difficulties, feel free to reach out in the support group or email us.

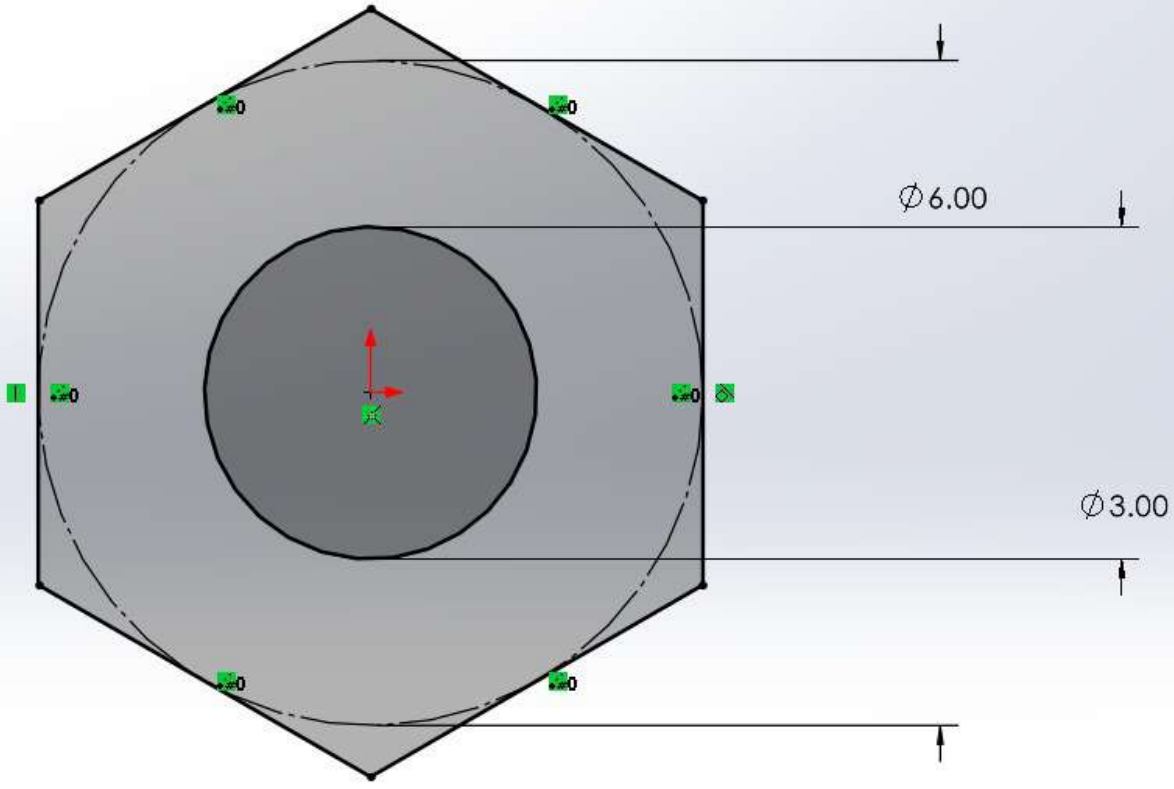
All the best,
**India Space Lab**








Ø6.00
Ø3.00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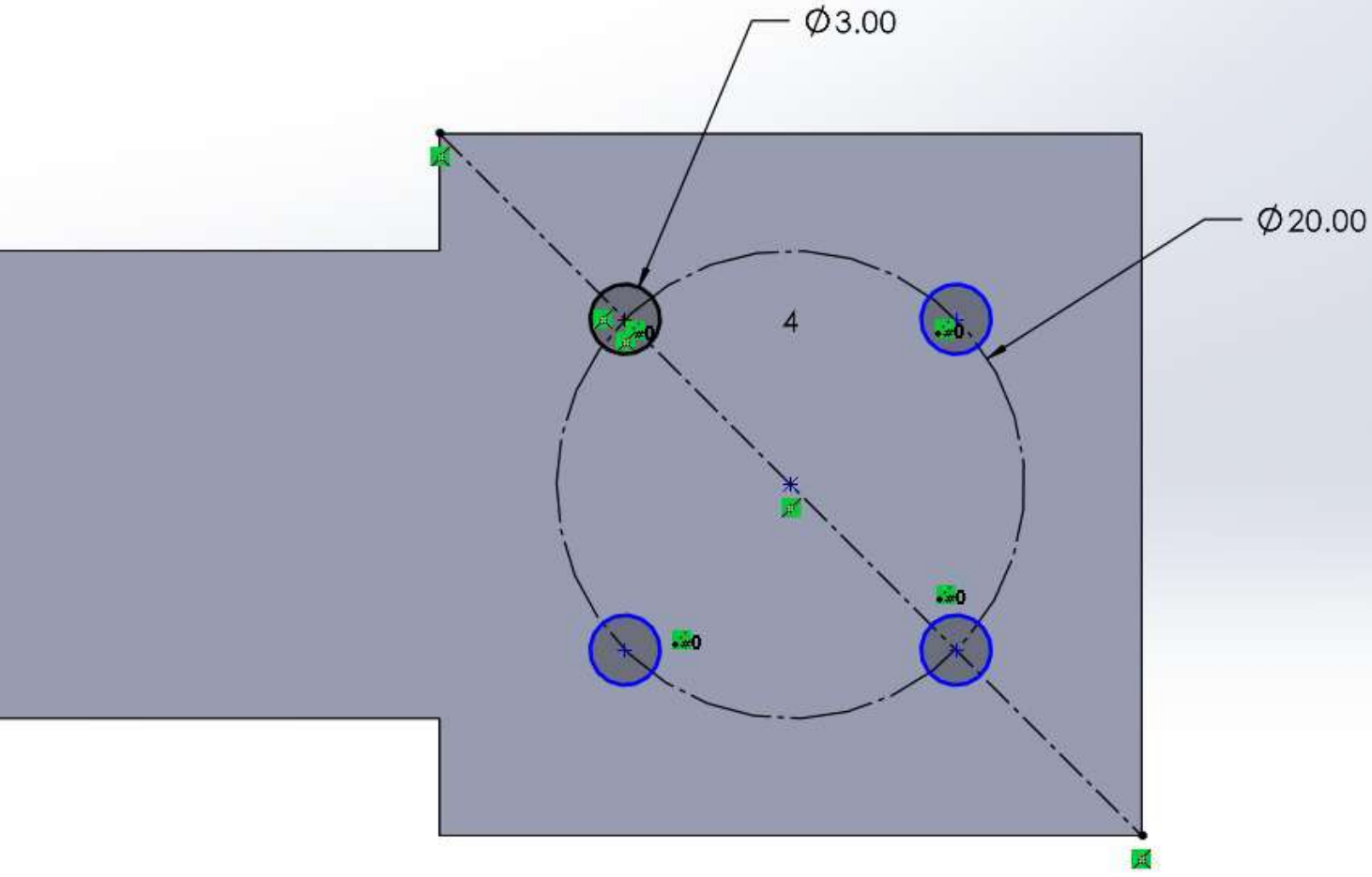
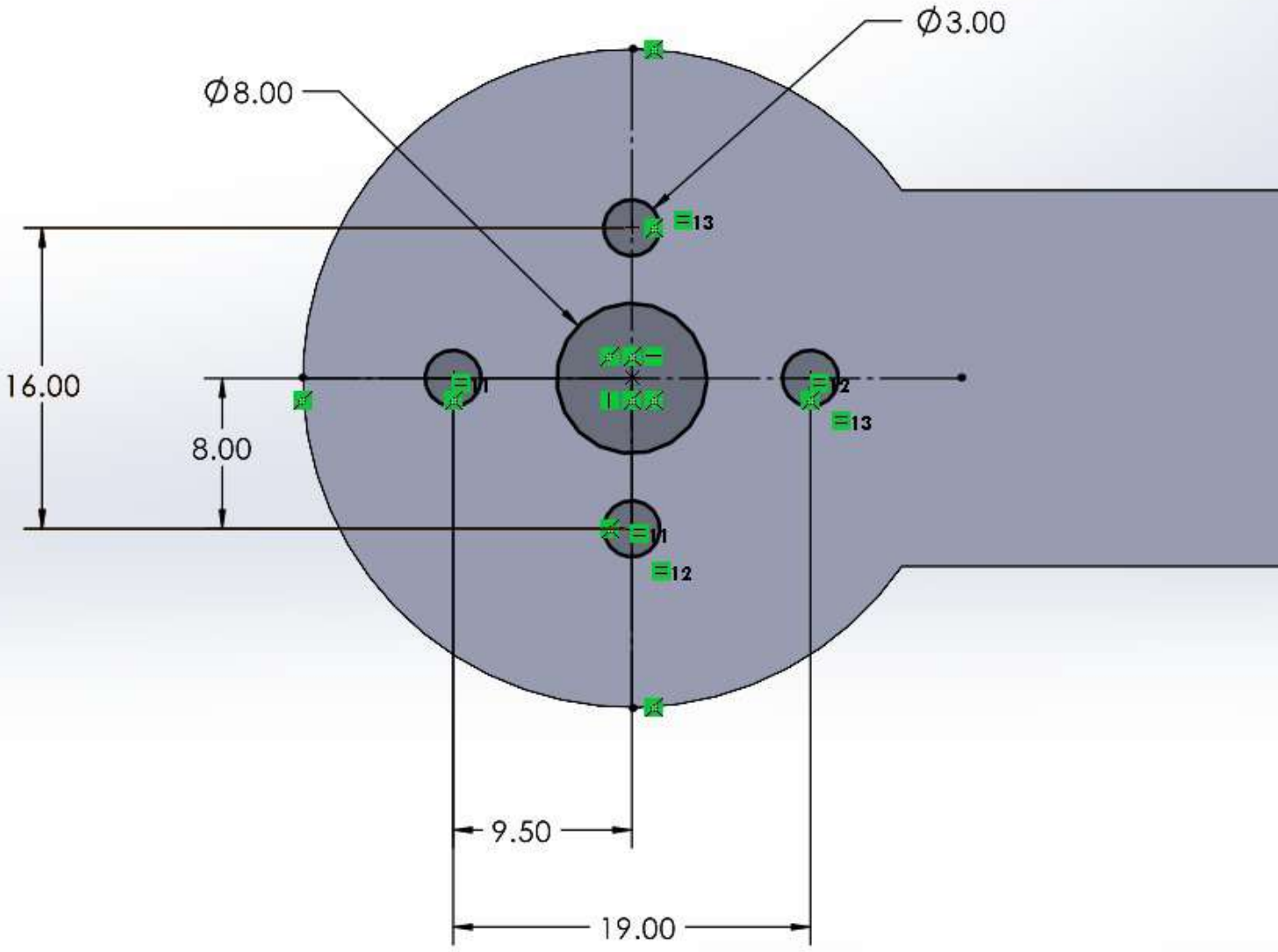
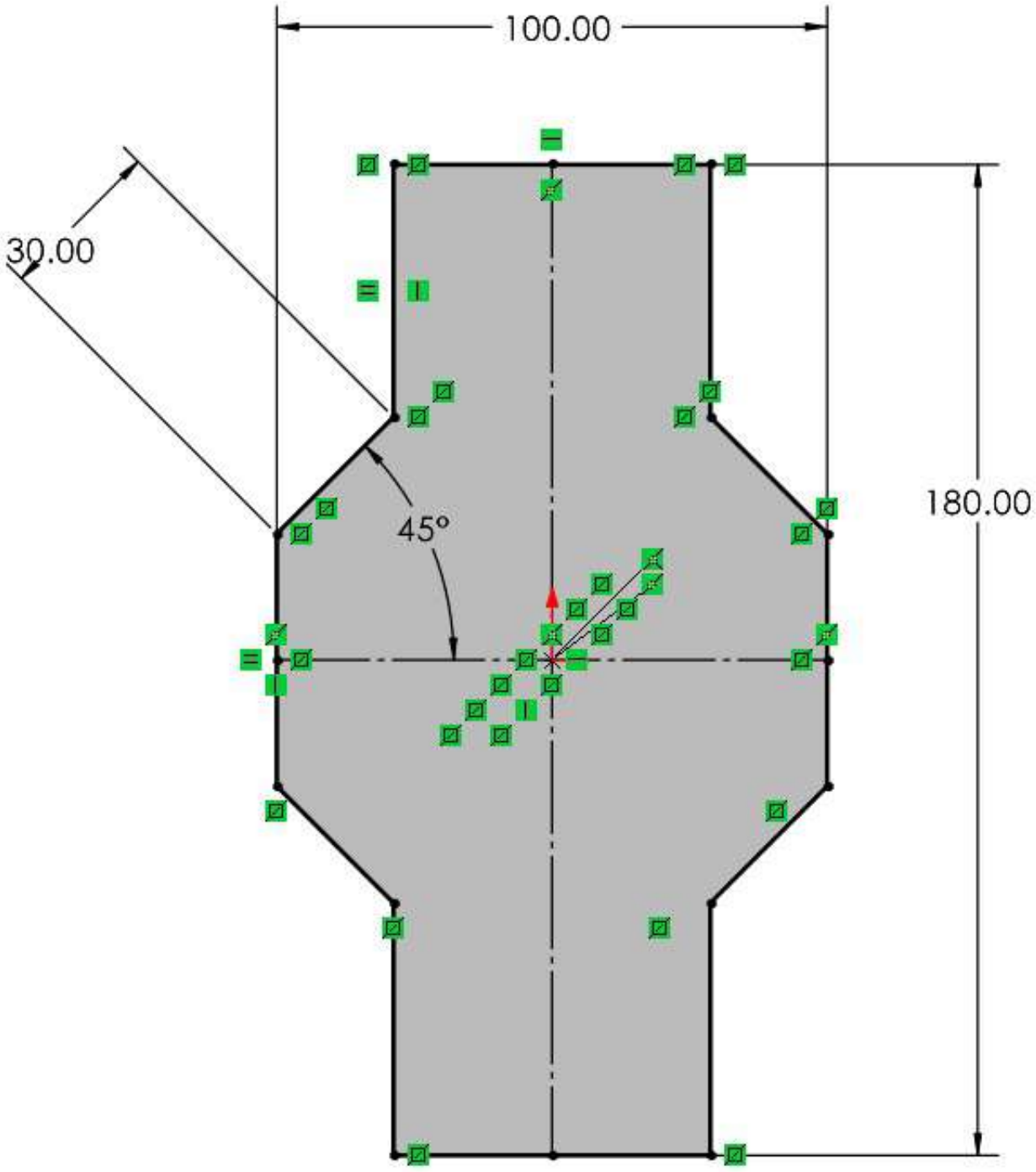
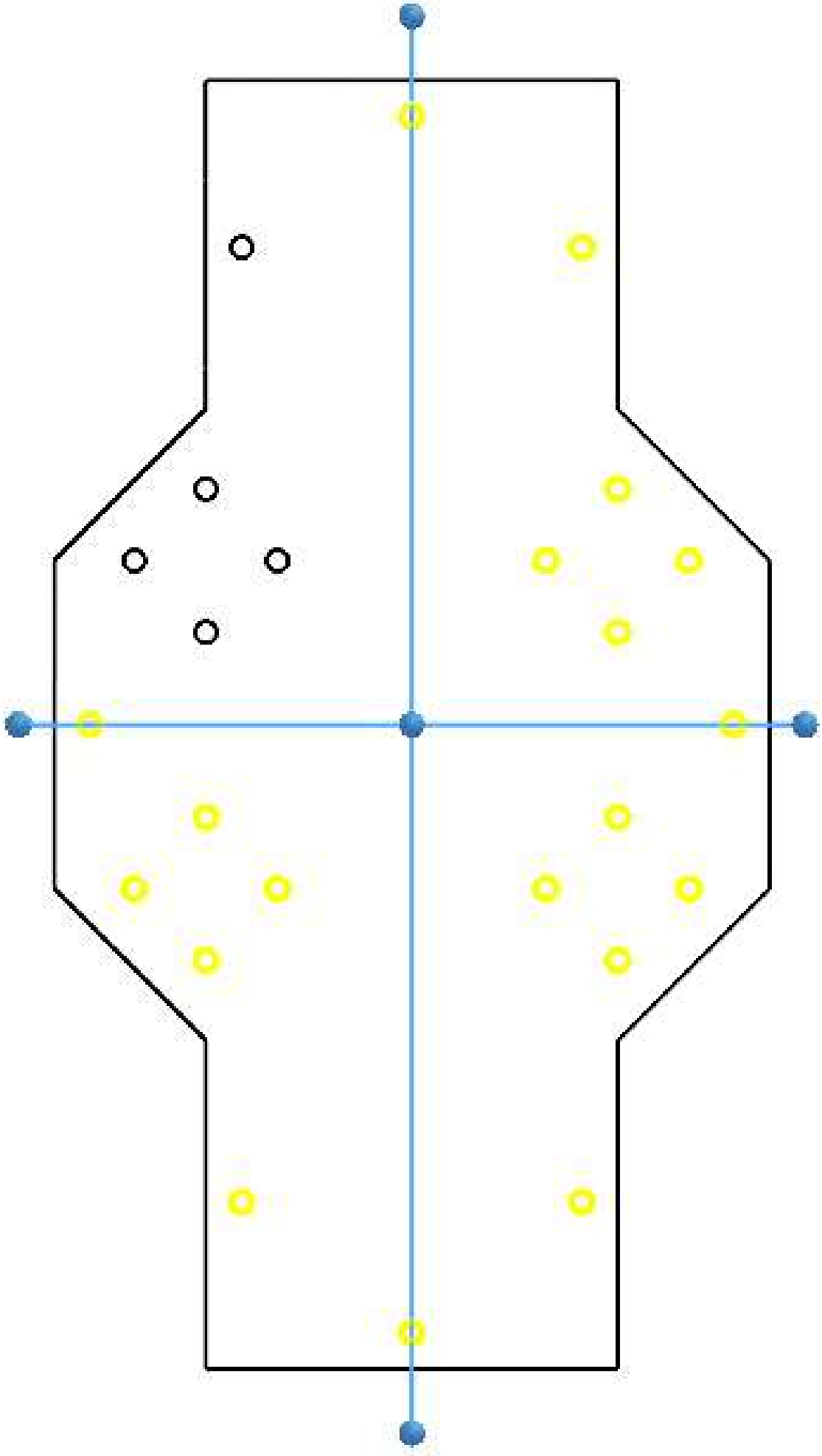
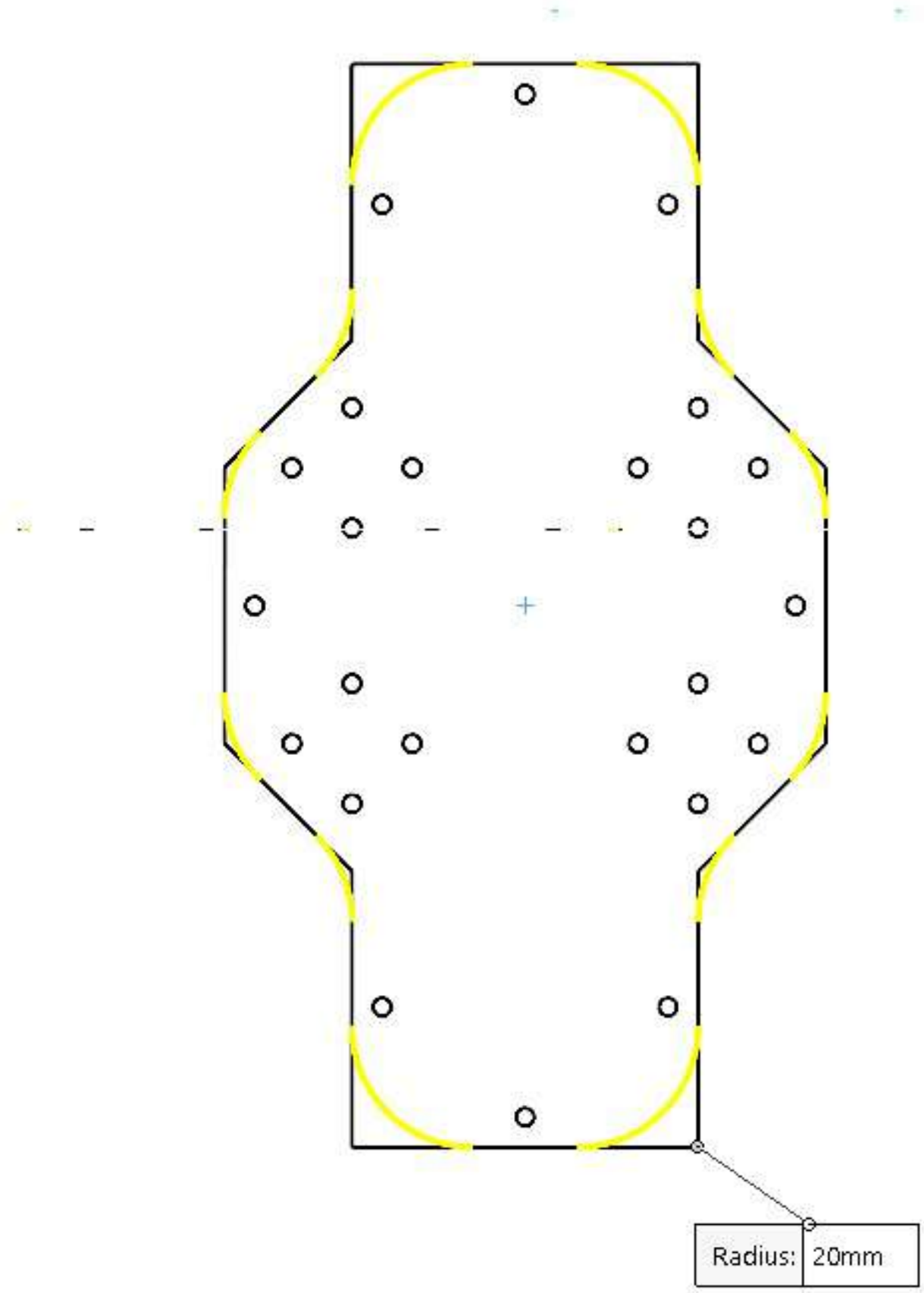
Radius: 10mm

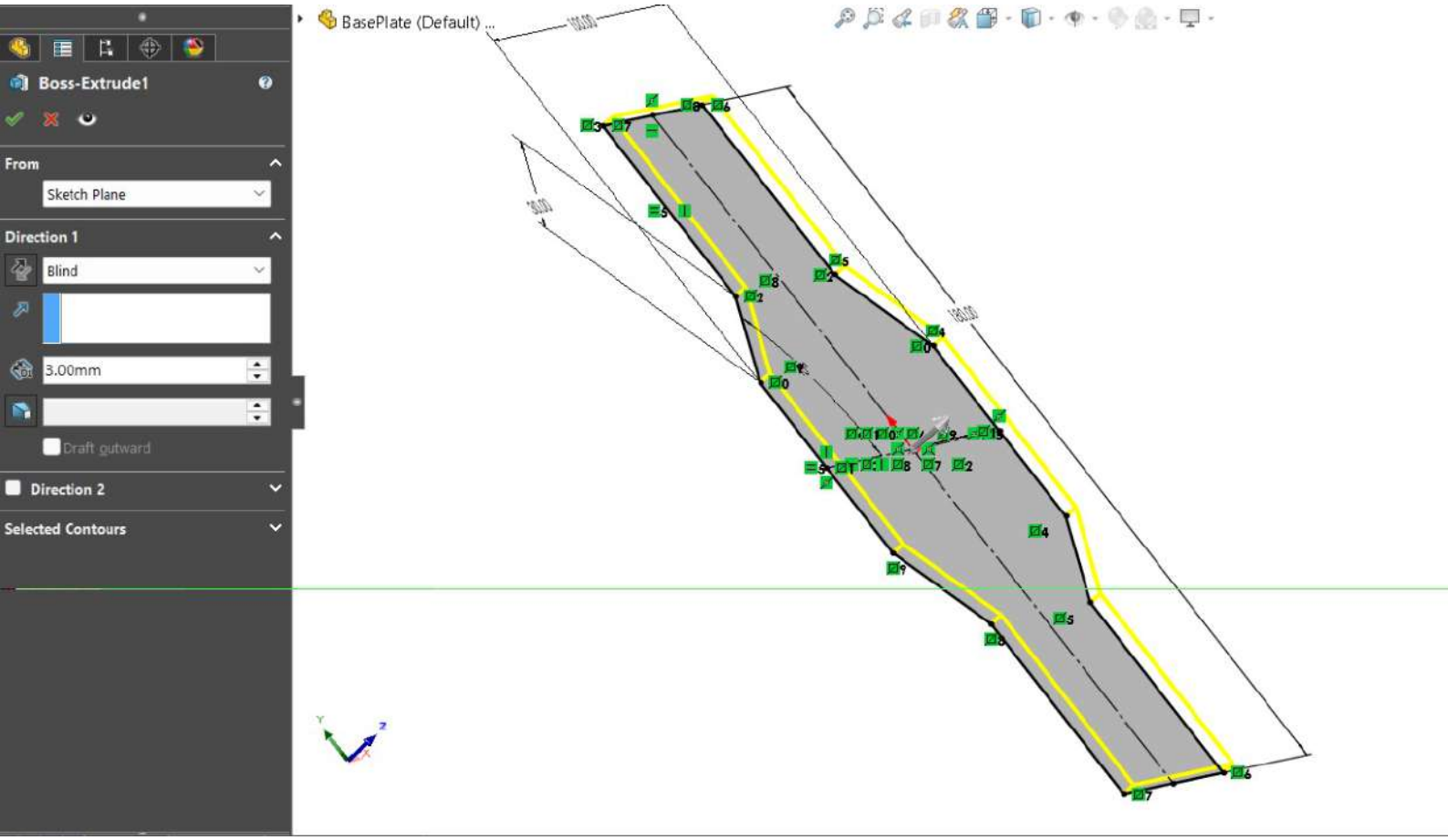

Ø3.00
Ø20.00
4

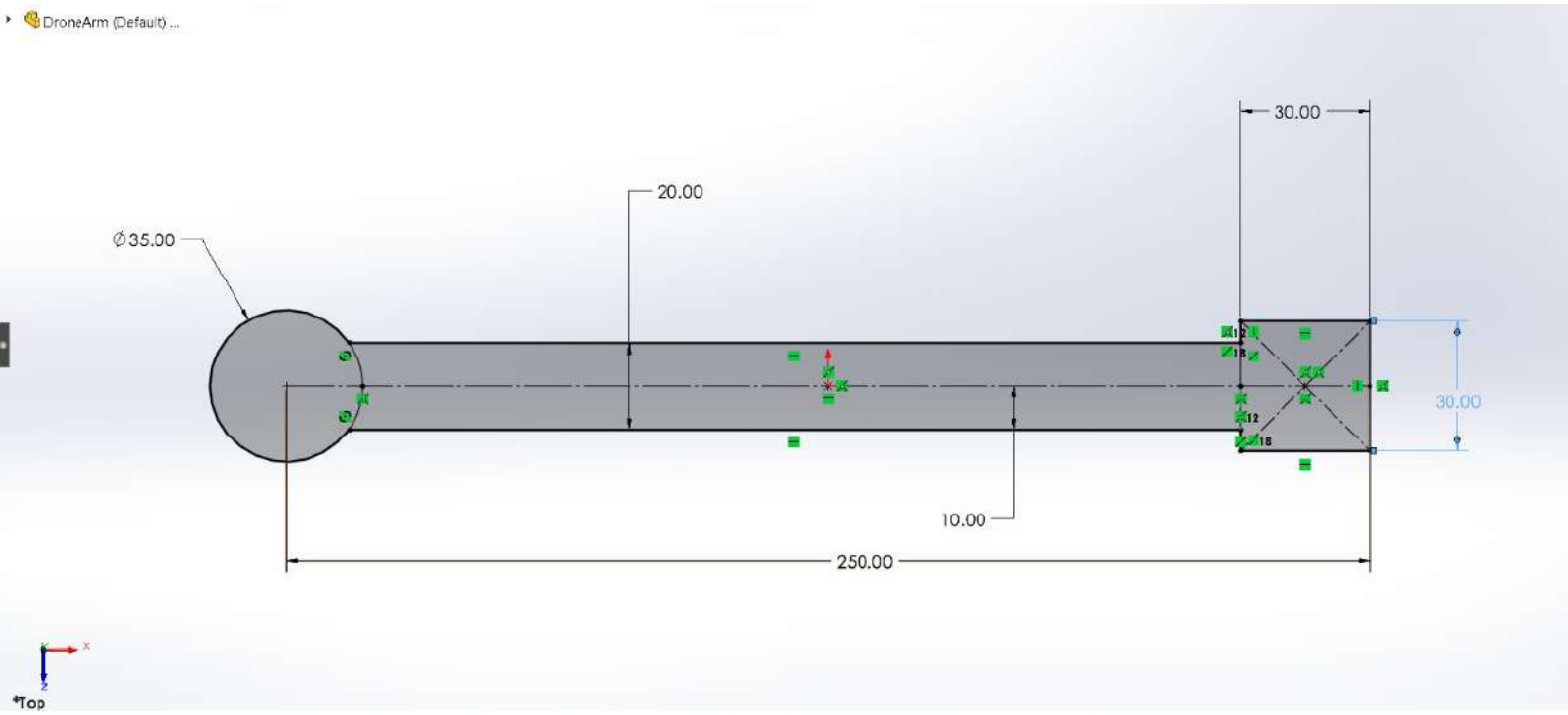

Ø3.00
Ø8.00
16.00
8.00
9.50
19.00

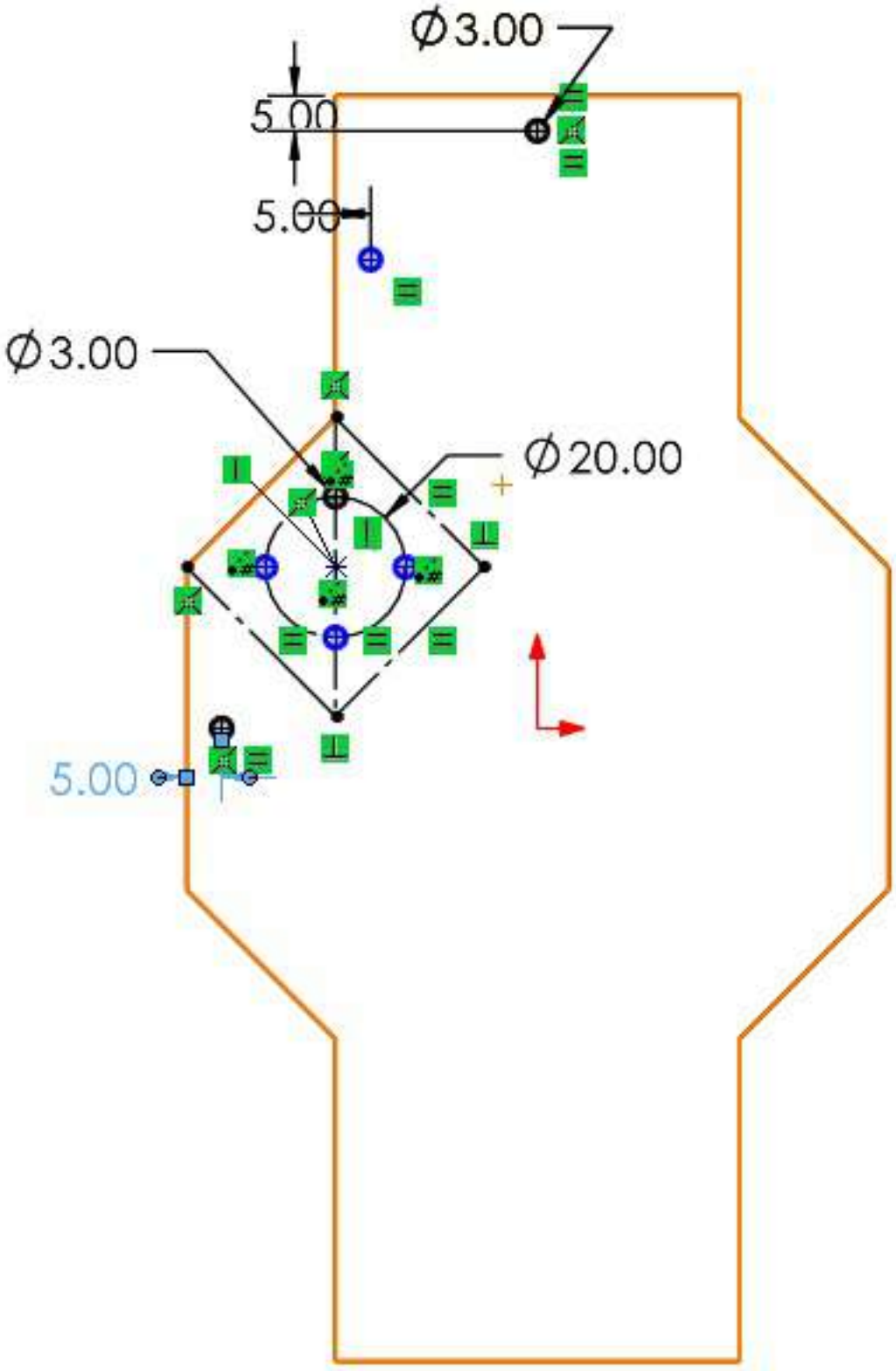

100.00
30.00
45°
180.00

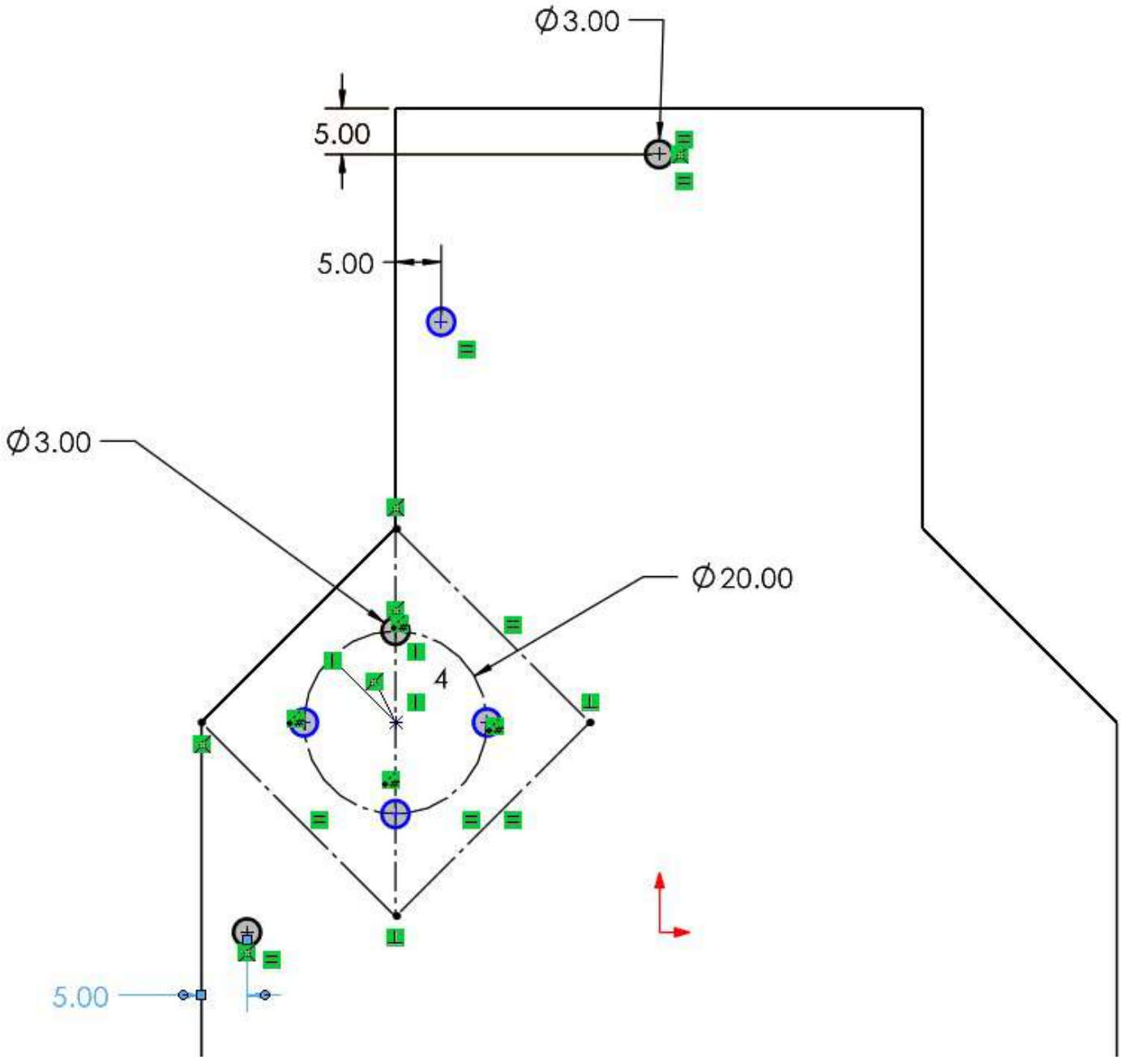



Radius: 20mm


Boss-Extrude1
From
Sketch Plane
Direction 1
Blind
3.00mm
Draft outward
Direction 2
Selected Contours
BasePlate (Default) ...


DroneArm (Default) ...
30.00
20.00
Ø35.00
30.00
10.00
250.00
*Top


Ø3.00
5.00
5.00
Ø3.00
Ø20.00
5.00


Ø3.00
5.00
5.00
Ø3.00
Ø20.00
4
5.00