



IPRC KIGALI

Integrated Polytechnic Regional College

P.o.Box 6579 Kigali-Rwanda
KK 15 Rd, Kigali
Tel: +250255120083
+250 0730672302
Email: info@iprckigali.rp.ac.rw
www.iprckigali.ac.rw

| Module Detail | | | |
|---------------|---------|-------|-------------------|
| SECTOR: | | | |
| SUB-SECTOR: | | | |
| COMPETENCE | | | |
| RTQF LEVEL: | Level 6 | Date: |/...../ 2023 |

LEARNING UNIT 2 – MODEL PARTS

ASSIGNMENT II

GROUP MEMBERS (REG NUMBERS)

1.
2.
3.
4.

1. What is an origin

- a) The point of intersection of the three default reference planes
- b) A singular location in a sketch, or a projection into a sketch at a single location of an external entity
- c) A single 3D object made up of a feature
- d) Both A & B

2. Which tool would you use to cut a hole through the object?

- a) Extrude cut tool
- b) Fillet tool
- c) Trim tool

3. What is the first thing you should set up before sketching in Solidworks?

- a) ISO

- b) Units
- c) ANSI
- d) Nothing

4. What special piece of sketch geometry is useful, but not required for a revolve feature?

- a) An arc
- b) An extrude cut
- c) A centerline
- d) A centerpoint

5. What is the command to move a sketch onto a different plane?

- a) Edit, Copy
- b) Features, Loft
- c) View, Planes
- d) Edit Sketch Plane

6. Explain What is axis

- a) A straight line that can be used to create model geometry, feature, or patterns, Can be made in a number of different ways, including using the intersection of two planes
- b) Repeats selected entities, features or components in a an array, which can be linear, circular, or sketch-driven
- c) When there are not enough dimensions and relations to prevent entities from moving or changing size
- d) All of Above

7. To what should your first sketch be referenced to?

- a) There is no object present to reference it to
- b) Origin
- c) Axis
- d) Center line
- e) None of the Above

8. What is a Base

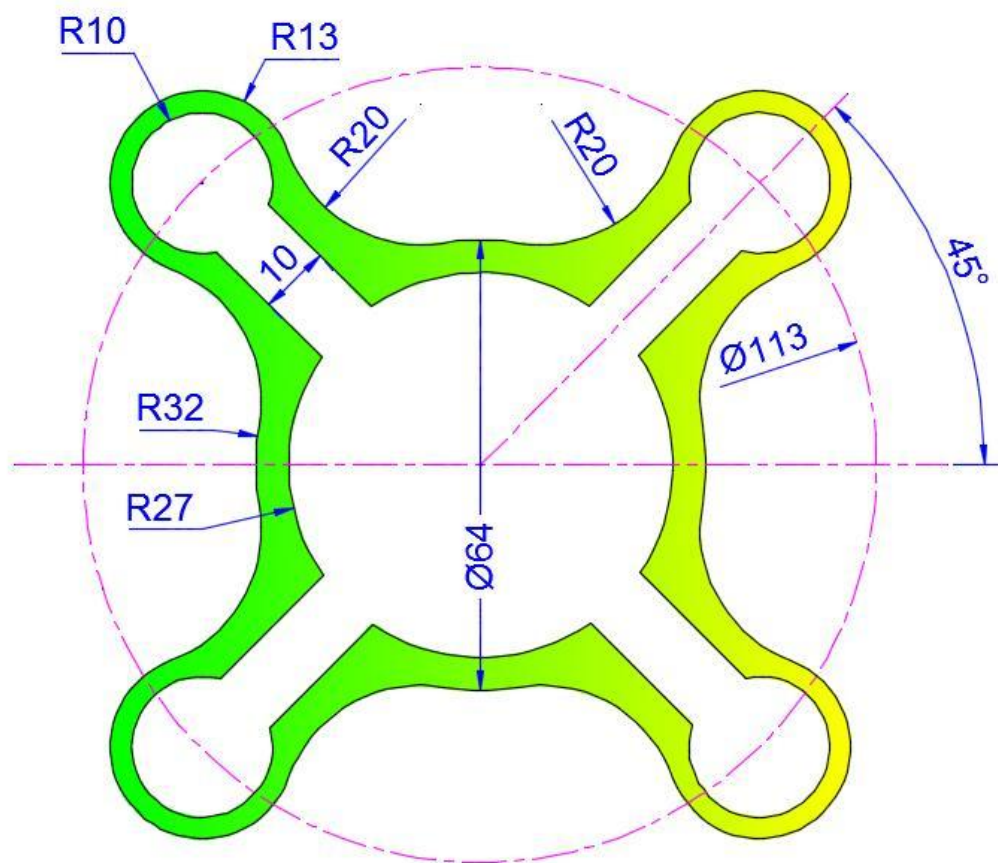
- a) Any part or sub-assembly within assembly
- b) A sketch used to create a feature or a drawing view ; can be open or closed
- c) The first solid feature or a part, created by a boss
- d) None of the above

9. This feature bevels a selected edge or vertex

- a) Slice
- b) Fillet
- c) Section
- d) Chamfer

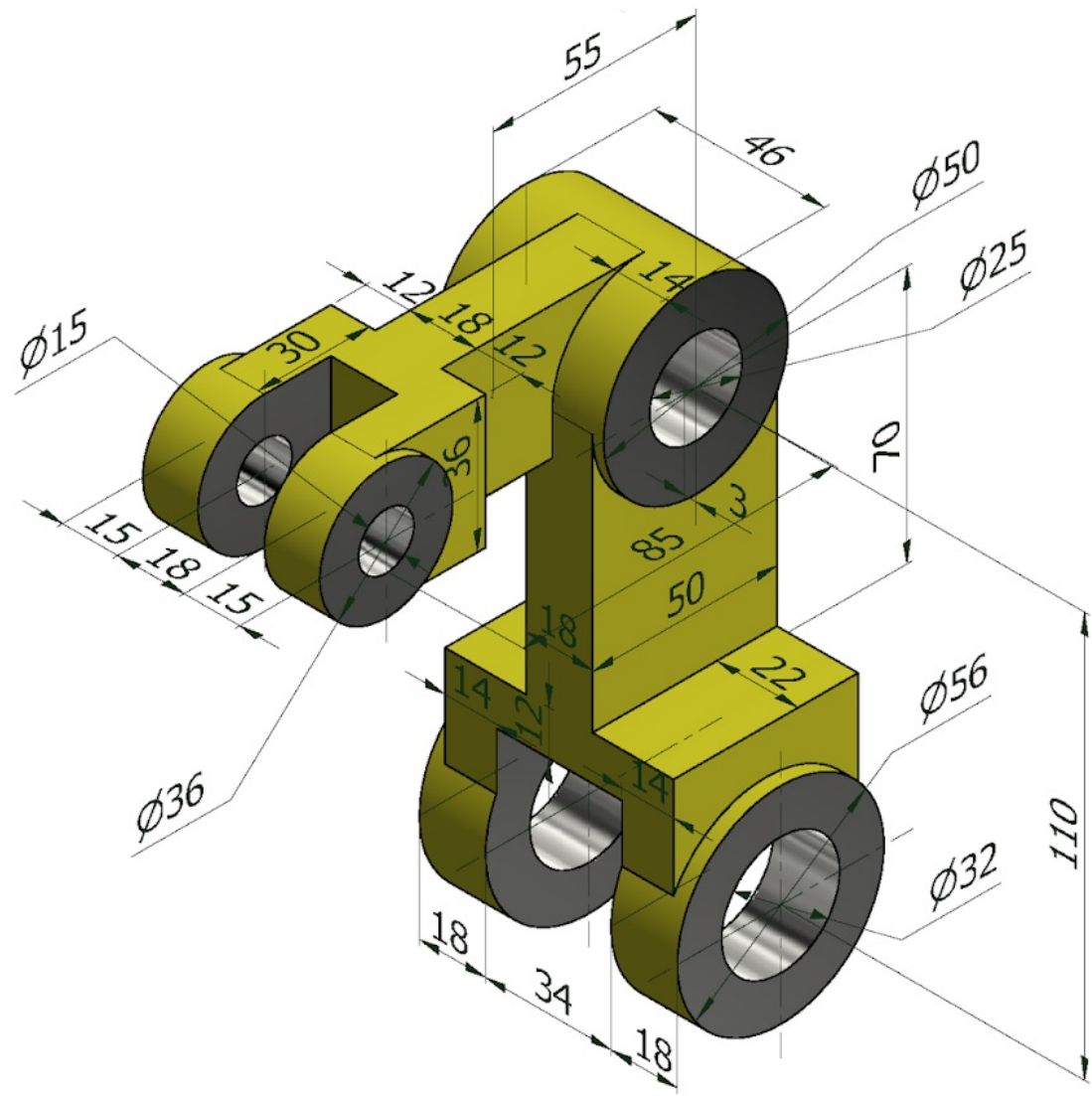
10. Create the sketch below by using MMGS as unit

- a) Calculate the Outer perimeter
- b) Calculate the Inner perimeter
- c) Calculate the overall mass if the part is made from Nickel and the thickness is 10 mm **Grams**



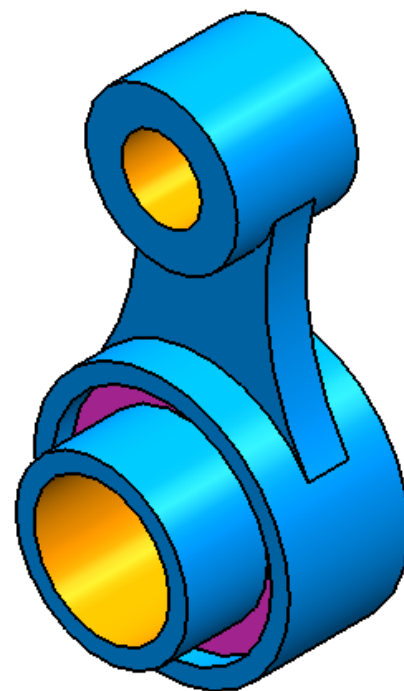
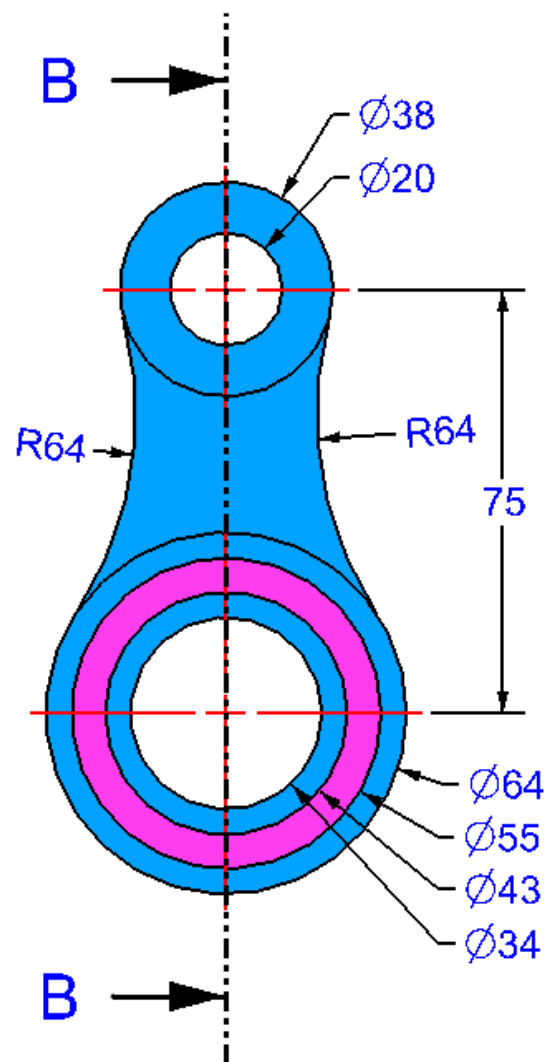
12. Create the 3D Model of the parts on pictures below.
Calculate the overall mass in Grams if the material is Titanium. (Use MMGS as unit)

PART 1 Grams



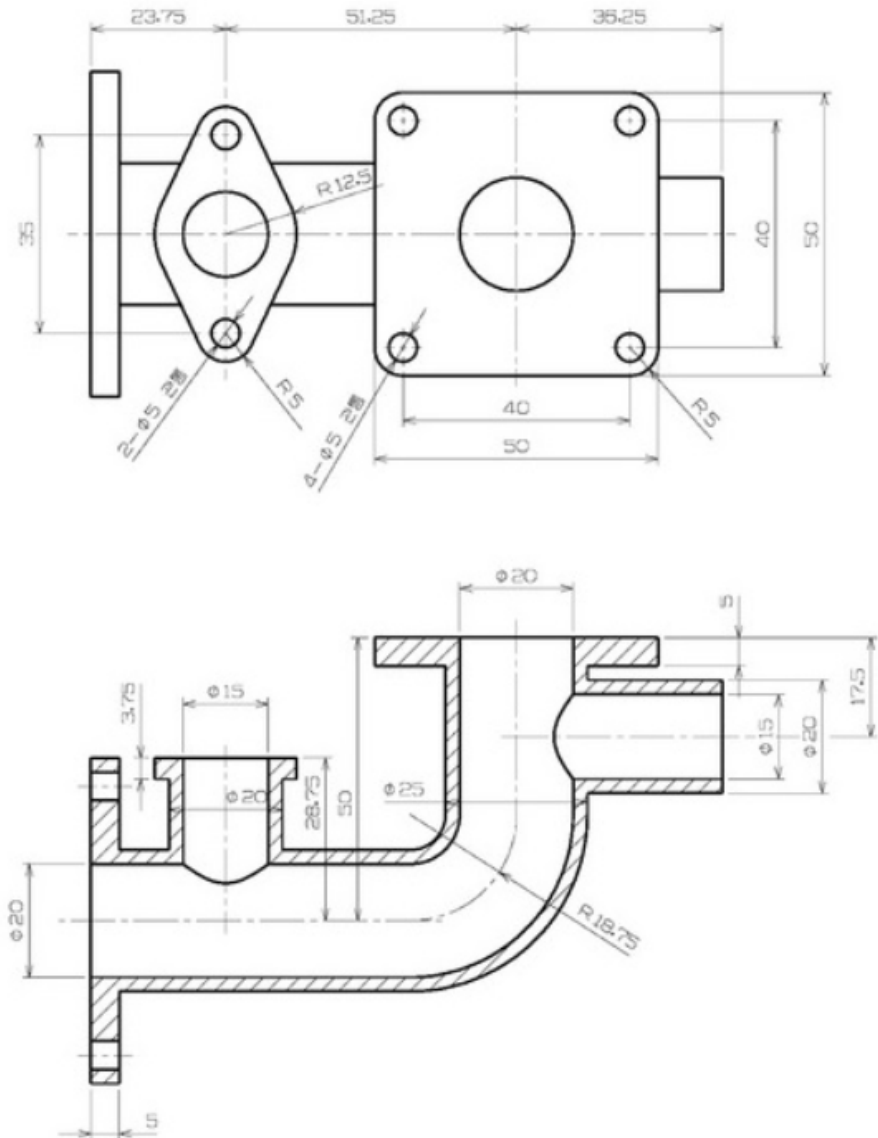
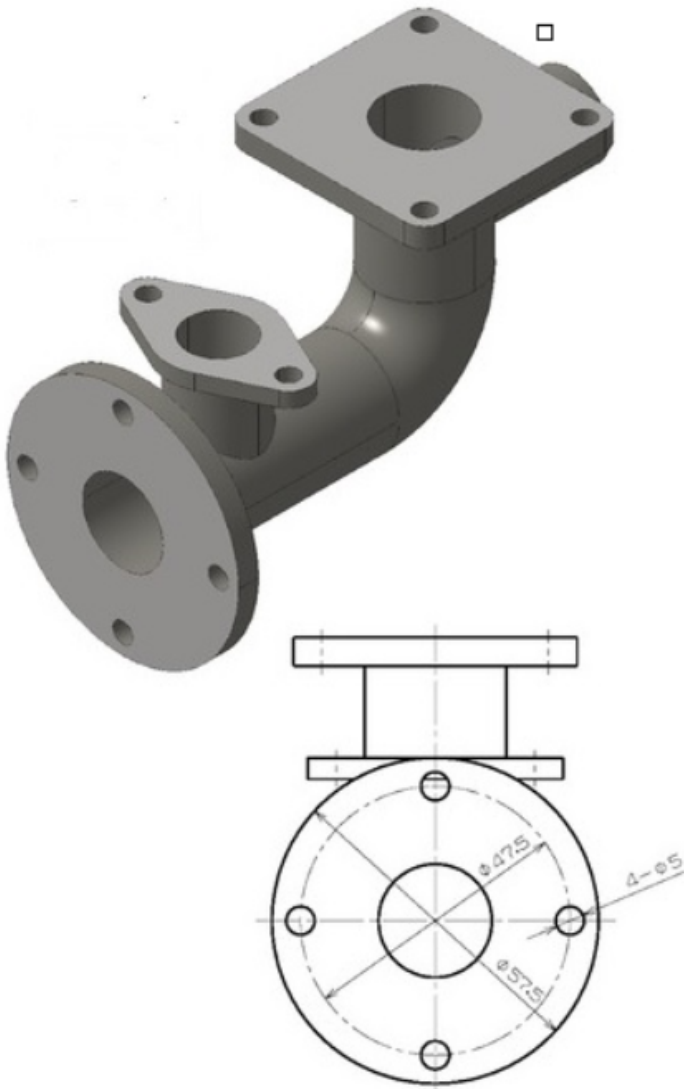
..... Grams



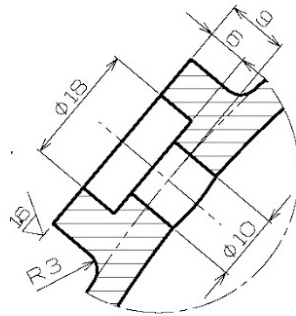


PART 4

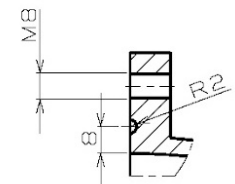
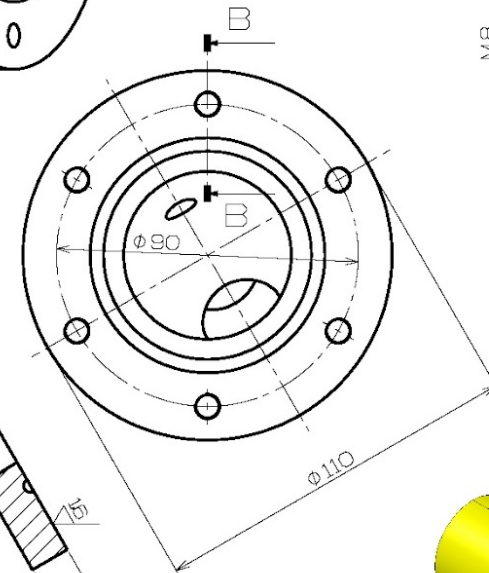
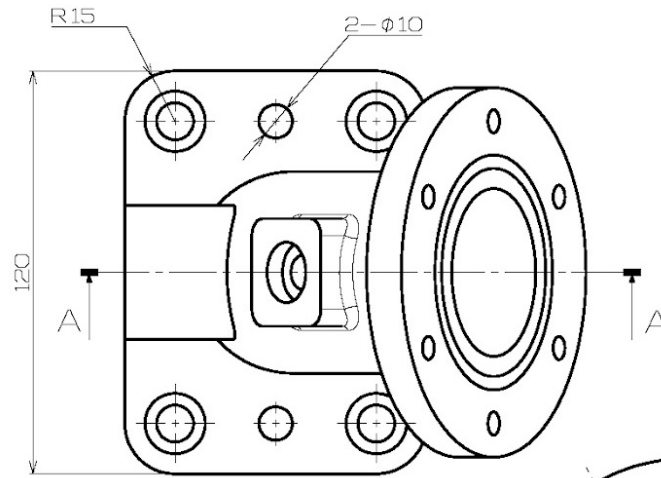
..... Grams



PART 5 Grams



세부사형
축척 (2:1)



섹션 뷰 B-B

