Nam : CAREL 1rstNam : Timothee Group: G3

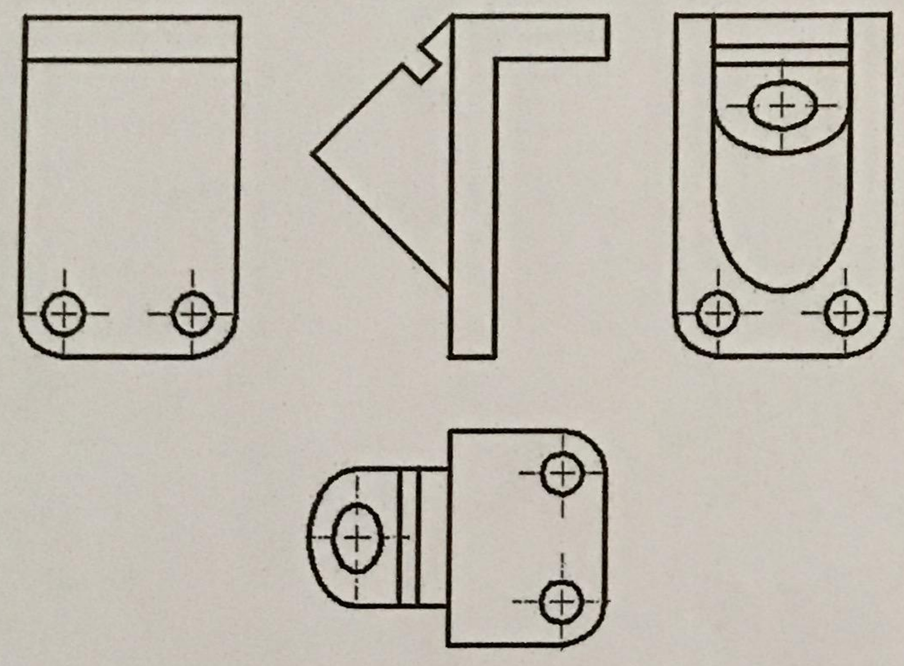
MULTIPLE CHOICE PART

In what follows, 15 questions are asked. At each of these questions, three proposals are made, you choose the correct answer. Please note, right answers give 1 point, non-answers give 0 point and wrong answers -1 point.

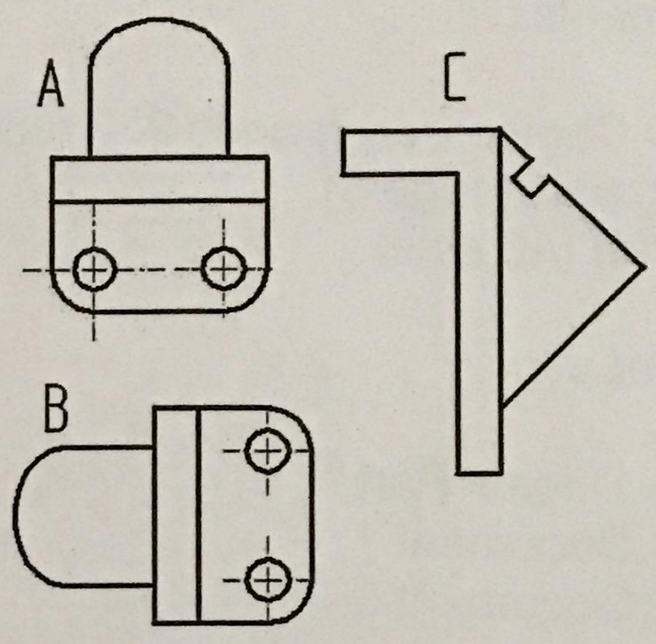
To answer, check the appropriate box.

Question #1

Here after, the front, right, left and top views are given:



What is the bottom view: A, B or C?

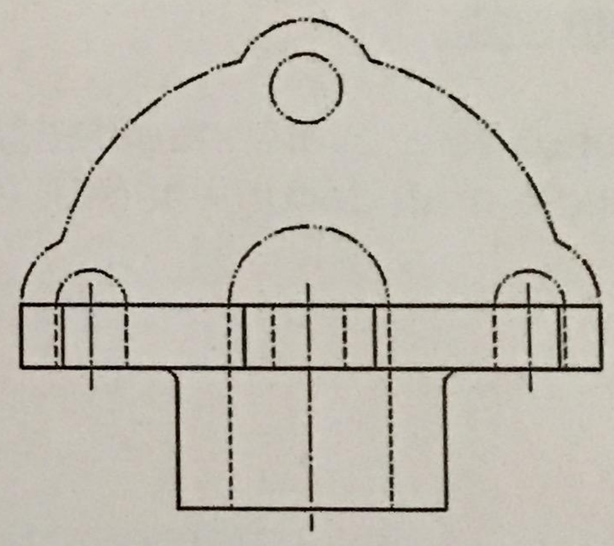


☐ A
☒ B
☐ C

Question #2

On the opposite main view, we have:

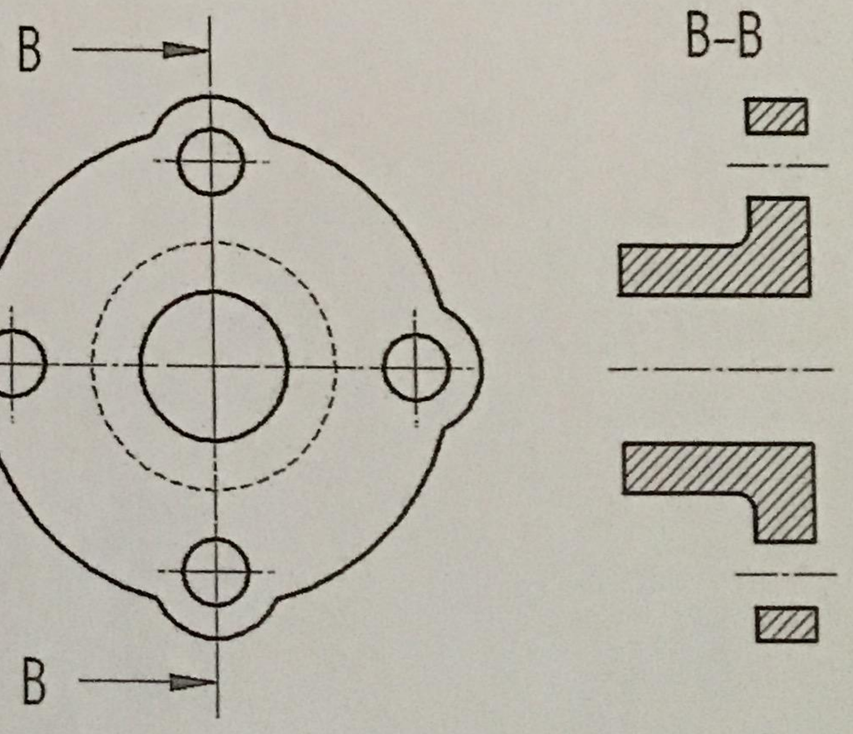
☐ 1/ a detailed view
☐ 2/ a section view
☒ 3/ a folded-up half view



Question #3

The B-B view is:

☐ 1/ a cross-section
☒ 2/ an extracted section
☐ 3/ a local cross-section



Nam : CAREL 1rstNam : Timothée Group: 63

INSA INSTITUT NATIONAL DES SCIENCES APPLIQUÉES LYON

HOMEWORK
Scan 1st

Subject content

Subject Documents:

- Multiple Choice Part (pages 2, 3 and 4),
- Drawing part (page 5),
- Main draft (A3 size)

Answer Documents:

- Multiple Choice Part,
- Answer Document 1,
- Answer Document 3.

Return documents

Return absolutely, even untreated, ALL answer documents.
Use the main draft document (A3) as a folder, leaving the frame with your full name apparent.

Remark

All the questions of the Multiple Choice Part and the answer documents 1, 2, 3 are independent.

Nam : CAREL 1rstNam : Timothee Group: 63

Question #4

The shape named A on the cross-section is:

- ☐ 1/ a bore
- ☐ 2/ an oblong hole
- ☒ 3/ a threaded hole

Question #5

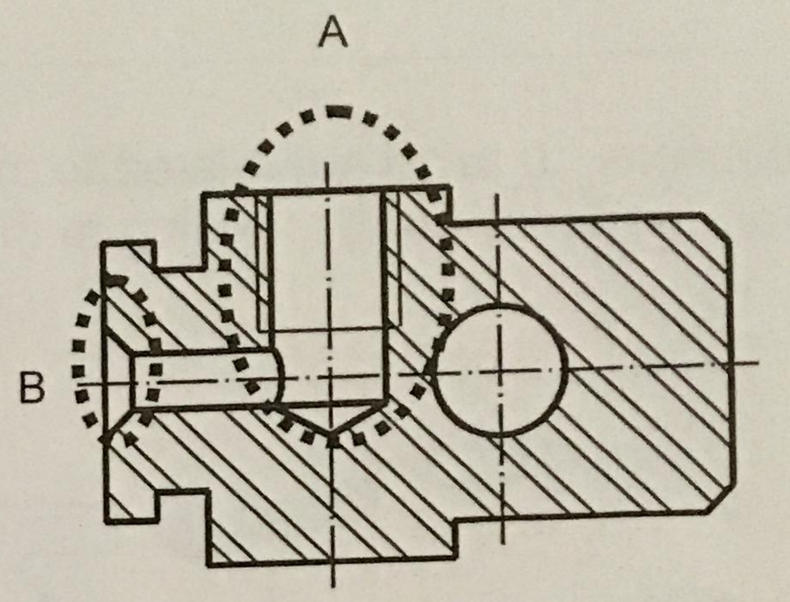
The shape named B on the cross-section is:

- ☐ 1/ a spot facing
- ☒ 2/ a countersinking
- ☐ 3/ a recess on a bore

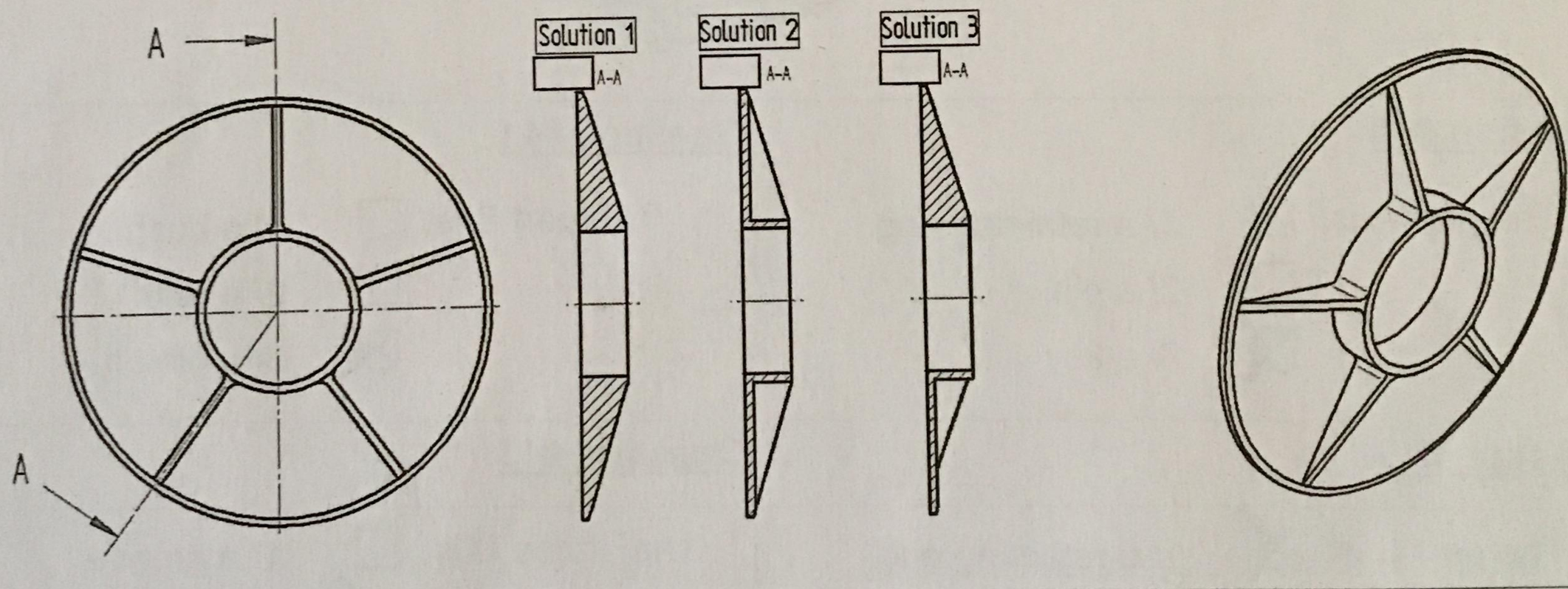
Question #6

The material of the part of the cross-section is:

- ☐ 1/ steel
- ☒ 2/ aluminium alloy
- ☐ 3/ plastic



Questions 7, 8 and 9 are linked to the drawing of the flange here after:



Question #7: What is the right solution?

- ☐ 1/ solution 1
- ☒ 2/ solution 2
- ☐ 3/ solution 3

Question #8

The cross-section A-A, above, is:

- ☒ 1/ a cross-sections using intersecting planes
- ☐ 2/ an extracted section
- ☐ 3/ a local section

DRAWING PART

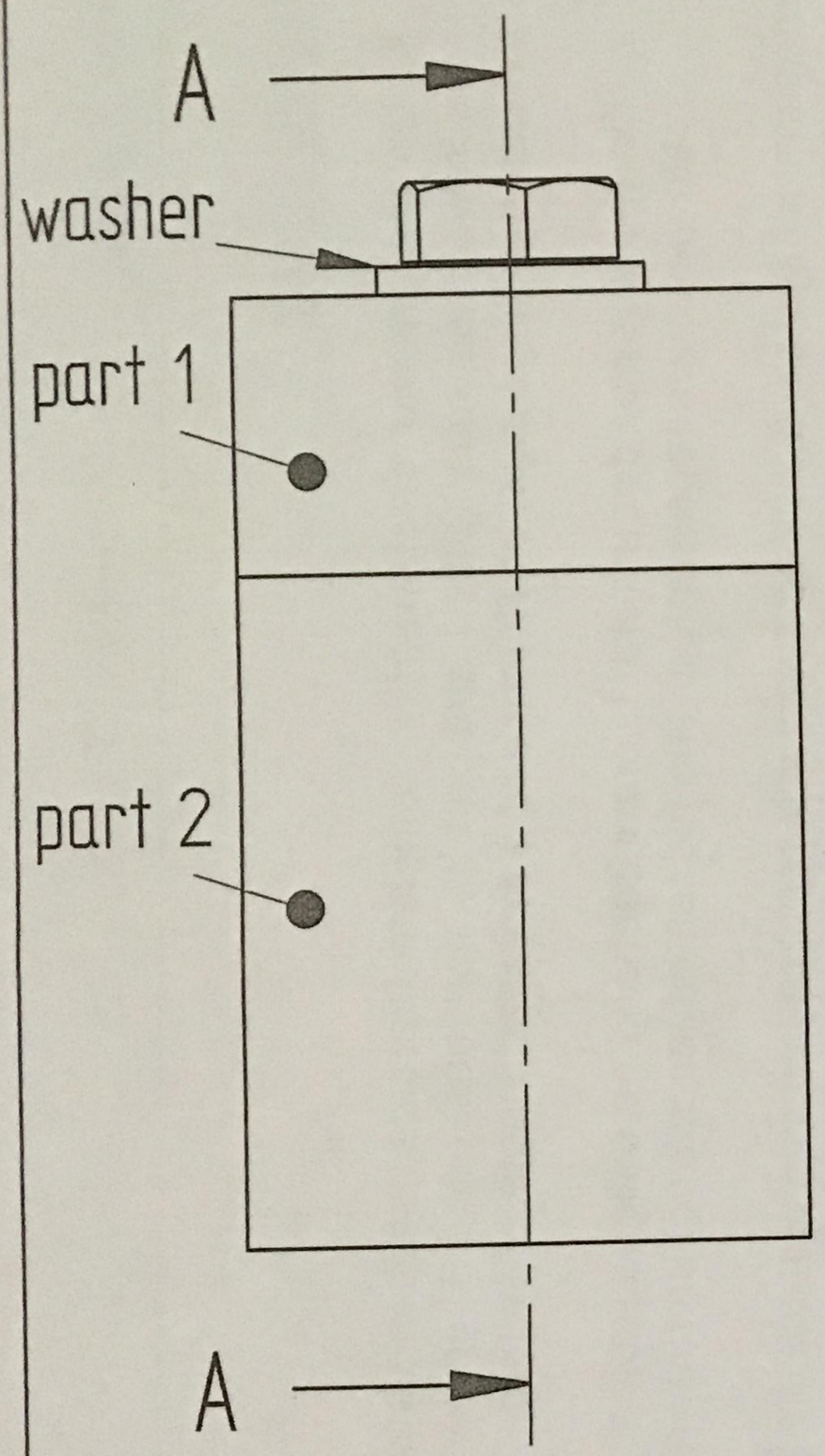
1. On the answer document 1, complete the cross-section view A-A which corresponds to a screwed assembly (part 1 and part 2). You must use a H screw M12.50.30 in a threaded hole with a drilling length of 45 mm and a threaded length of 40 mm.

2. On the answer document 1, draw freehand an oblique projection for the part for which the 3 main views are represented. The hidden edges will not be drawn.

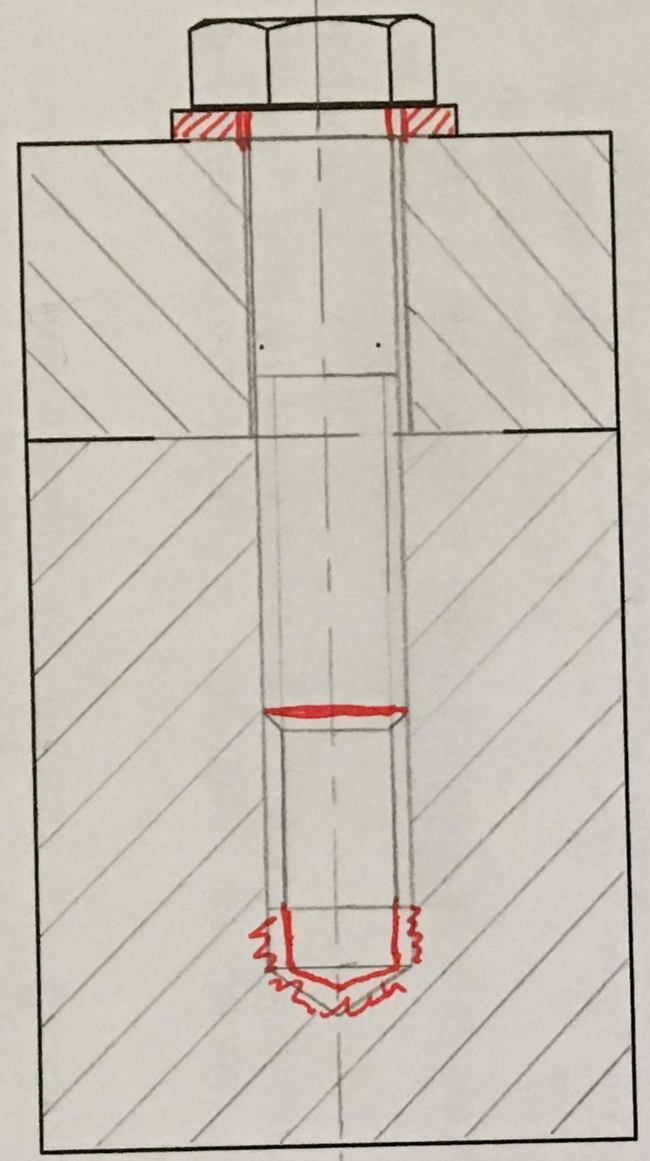
A mechanical system (blocking system) is represented on the main draft here enclosed.
In what follows, 1 detailed drawing of part of the main draft will be completed.
It is not necessary to understand the operating of the system.

3. On the answer document 3, complete the detailed view of the "SCREW CONTROL" part (scale 2:1). Use the main drawing to identify dimensions. Draw hidden edges. Dimensioning is not requested.

   - A Front view with a local section at the extreme part of the shaft to represent the threaded hole,
   - A Right view,
   - A section A-A (imposed section plane).
   - A section B-B (imposed section plane).



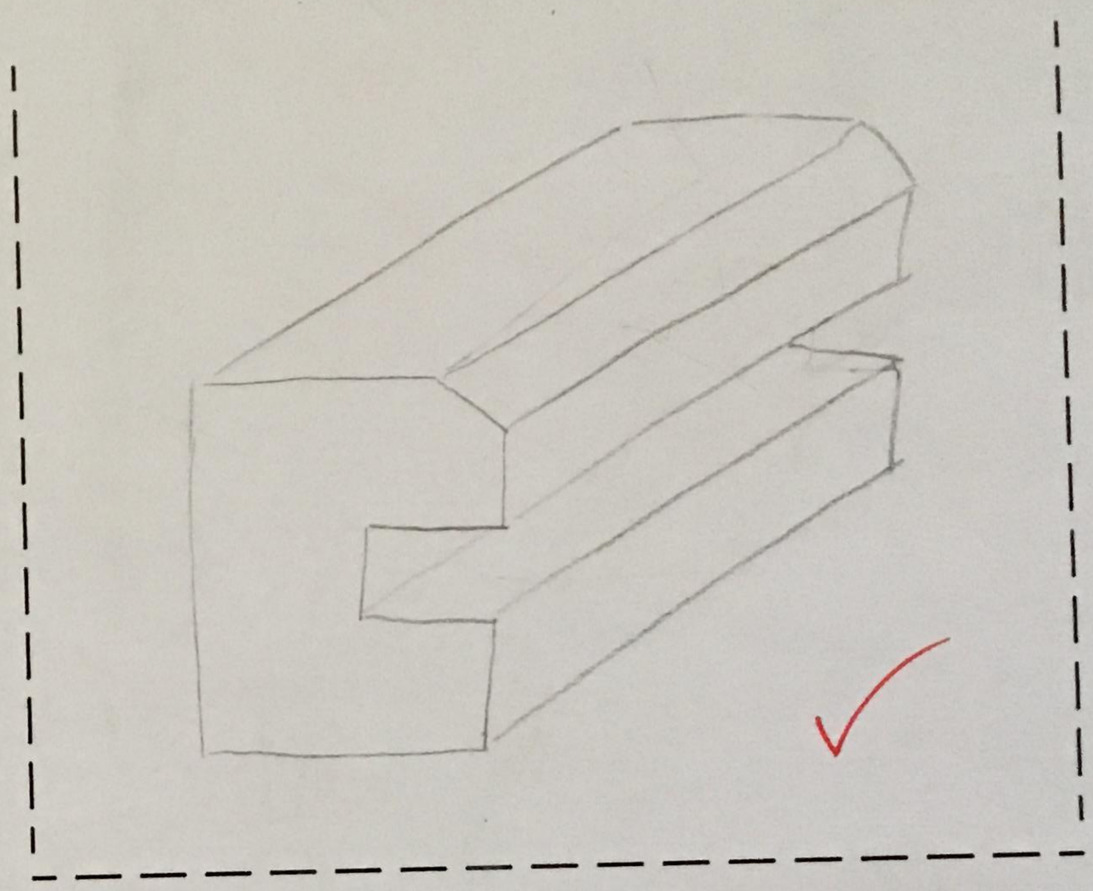
Cross-section A-A
to be completed

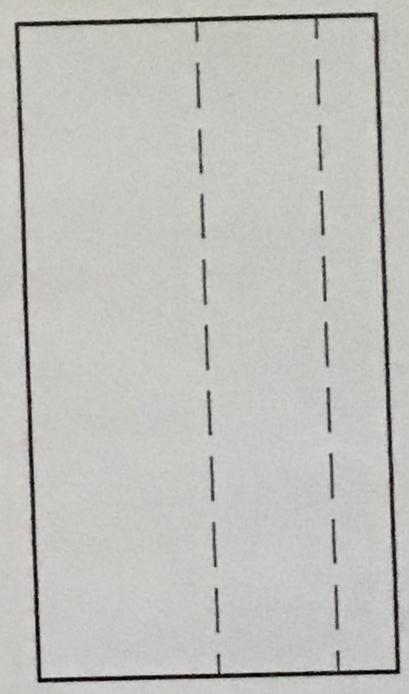


Cross section A-A

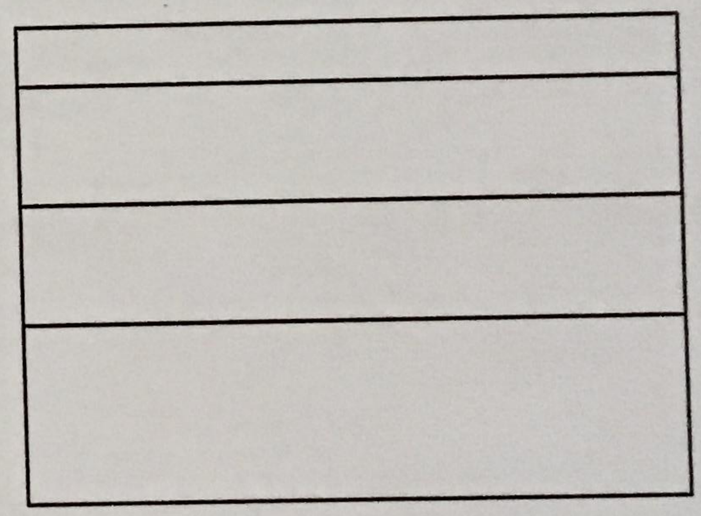
oblique projection to be drawn

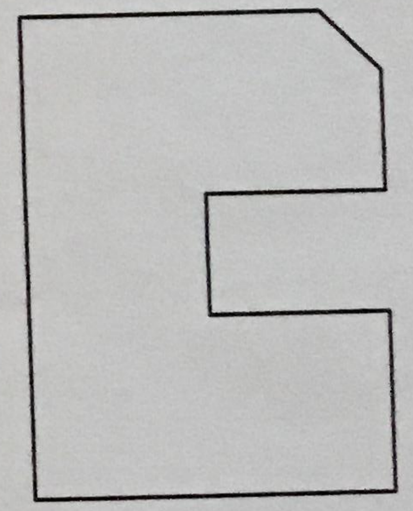
The view F will be the front (scale 1:1).





View F





Answer Document 1

Name: CAREL

1rstname: Timothée

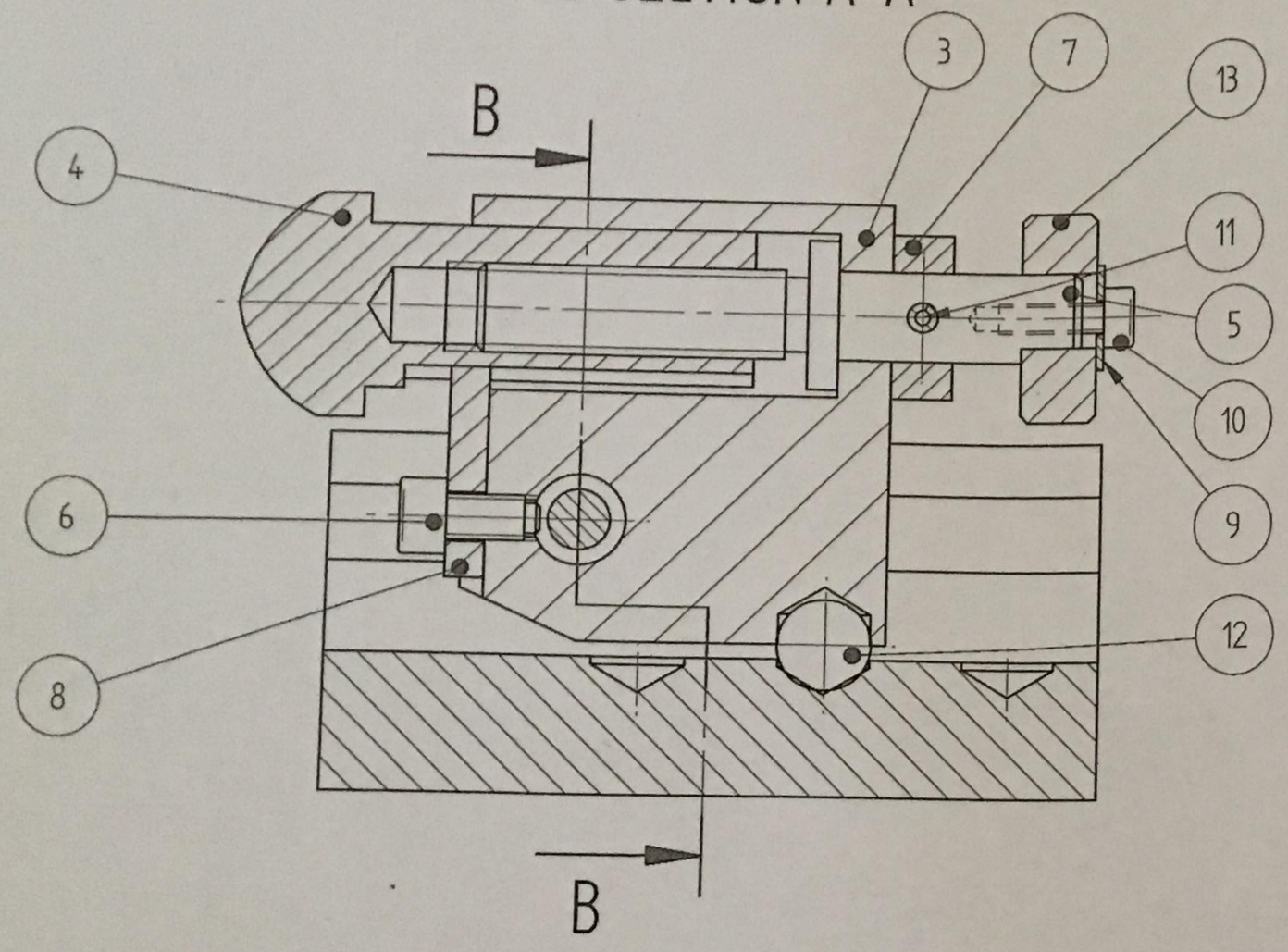
Exercice DR1			
	Part:		
Group: 63	Material: steel	Date: 01/09/2011	
		Scale: 1:1	INSA

Name: CAREC

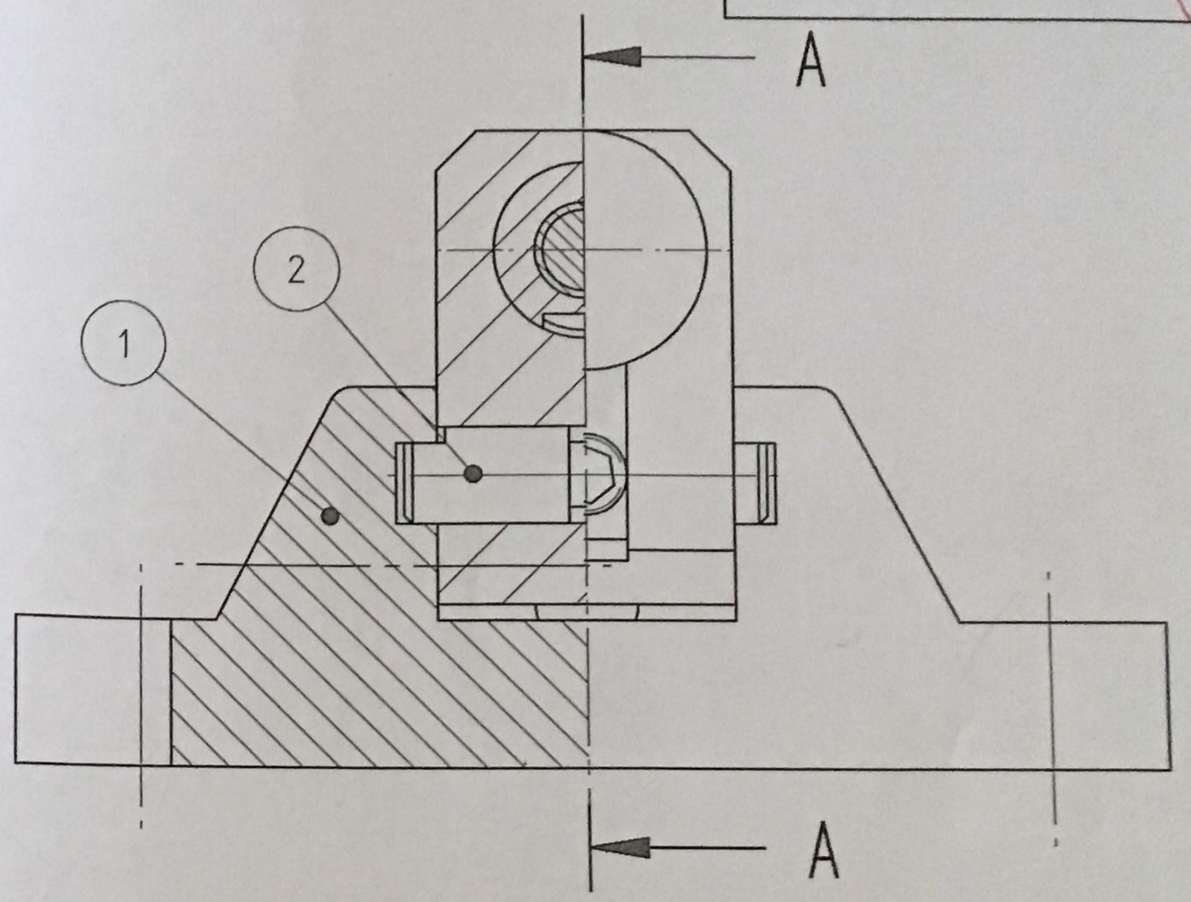
1rst name: Timothée

16,7/20

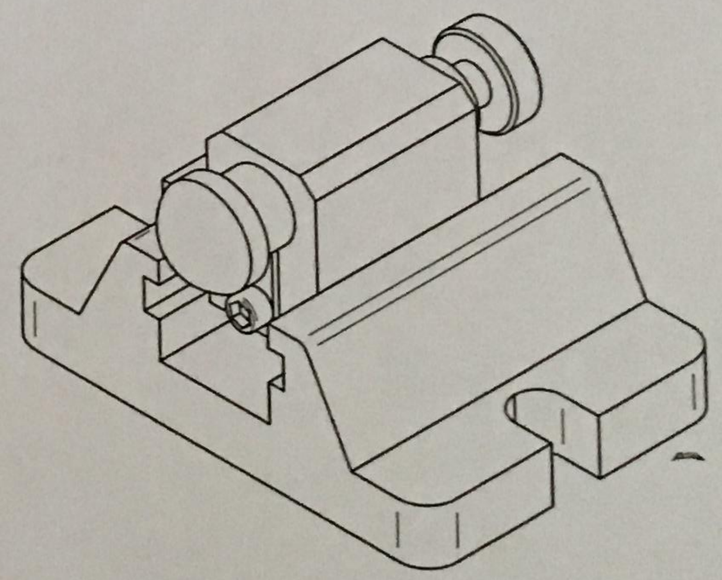
CROSS SECTION A-A



B-B



#	Nber	Name	Material	
1°	1	sliding bed plate	Steel	
2°	1	shaft	Steel	
3°	1	Body	Steel	
4°	1	sleeve	Steel	
5°	1	control screw	Steel	
6°	1	Chc screw M6	Steel	
7°	1	washer	Steel	
8°	1	stopping plate	Steel	
9°	1	flat washer	Steel	
10°	1	CHc screw M4	Steel	
11°	1	elastic pin 4x22	Steel	
12°	1	Ball - diamter 12	Steel	
13°	1	Bouton	Steel	



Scale 1:1

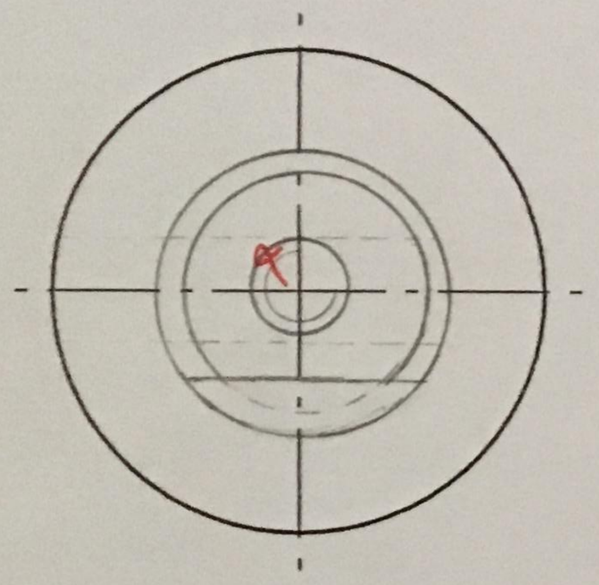
BLOCKING SYSTEM

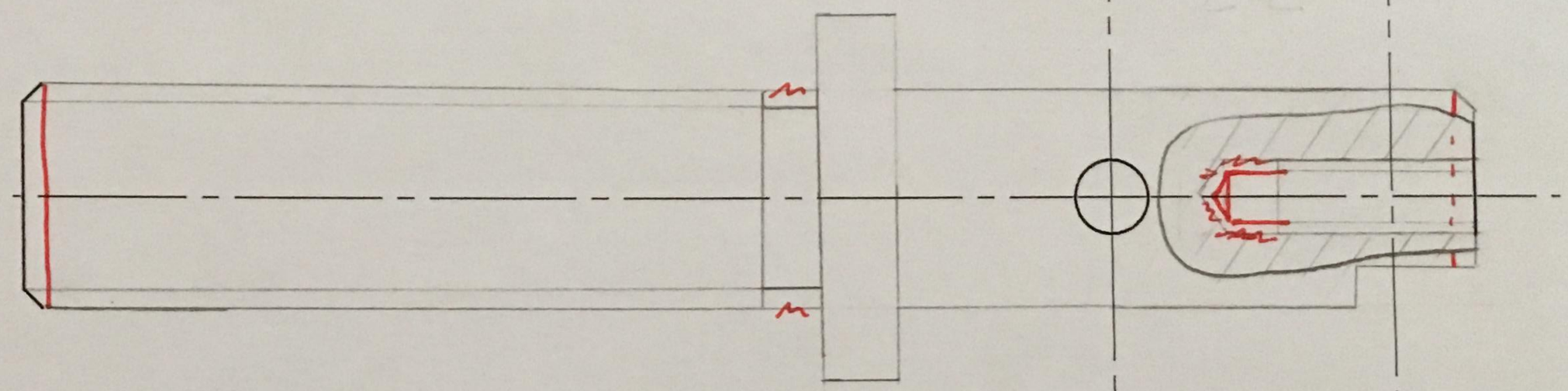
Group: 63

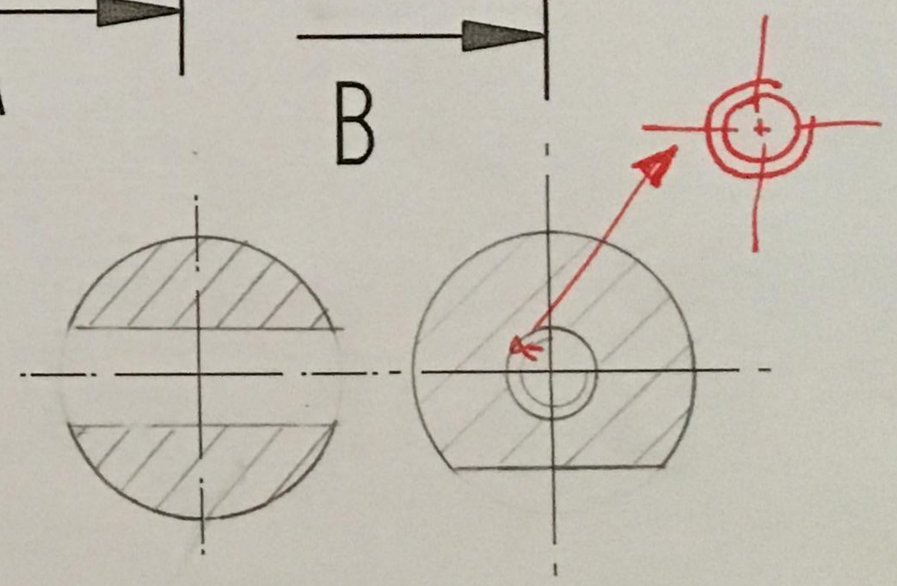
Date: 01/08/2011

INSA

Answer Document 3







Section A-A Section B-B

Scale 2:1

Name: CAREL

1rst name: Timothée

Exercice DR3		
	Part: CONTROL SCREW	
Group: 63		Date: 01/08/2011
		INSA