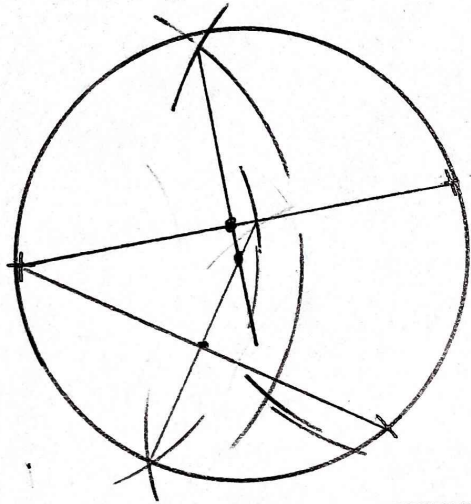
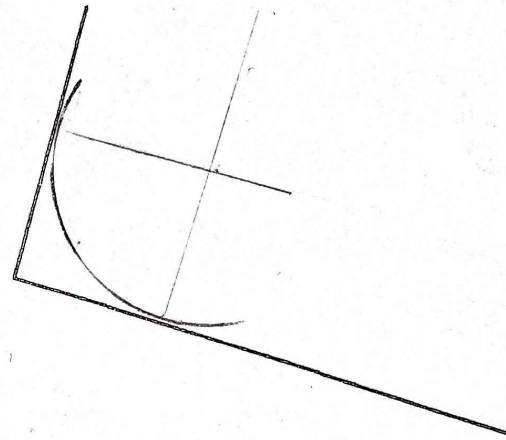


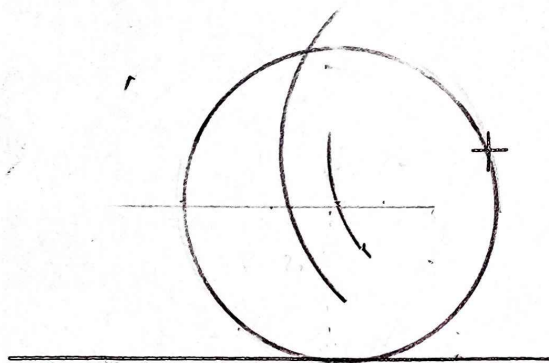
draw a circle that pass through the following three points



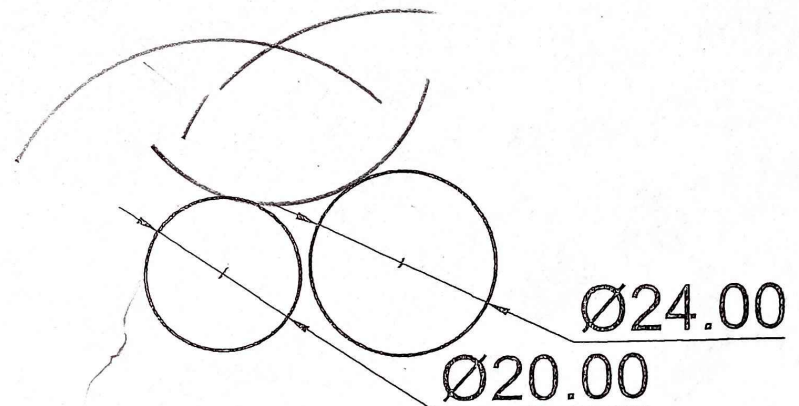
draw a circle tangent to the following two lines (R=20 mm)



Draw a circle that pass through the point and tangent to the line (R=20)

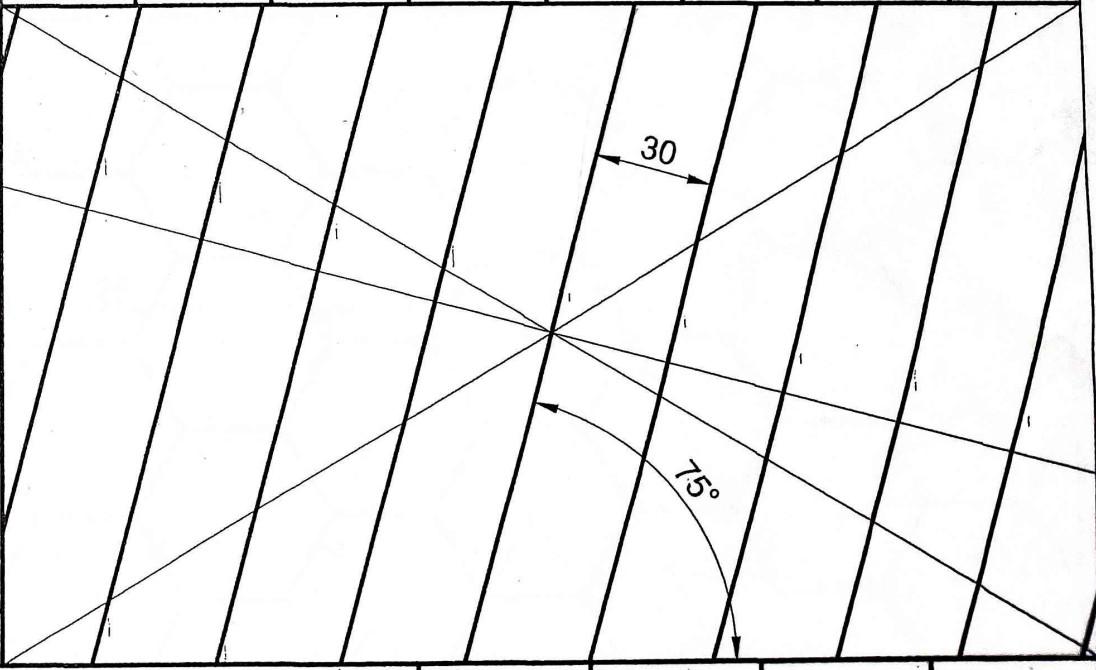
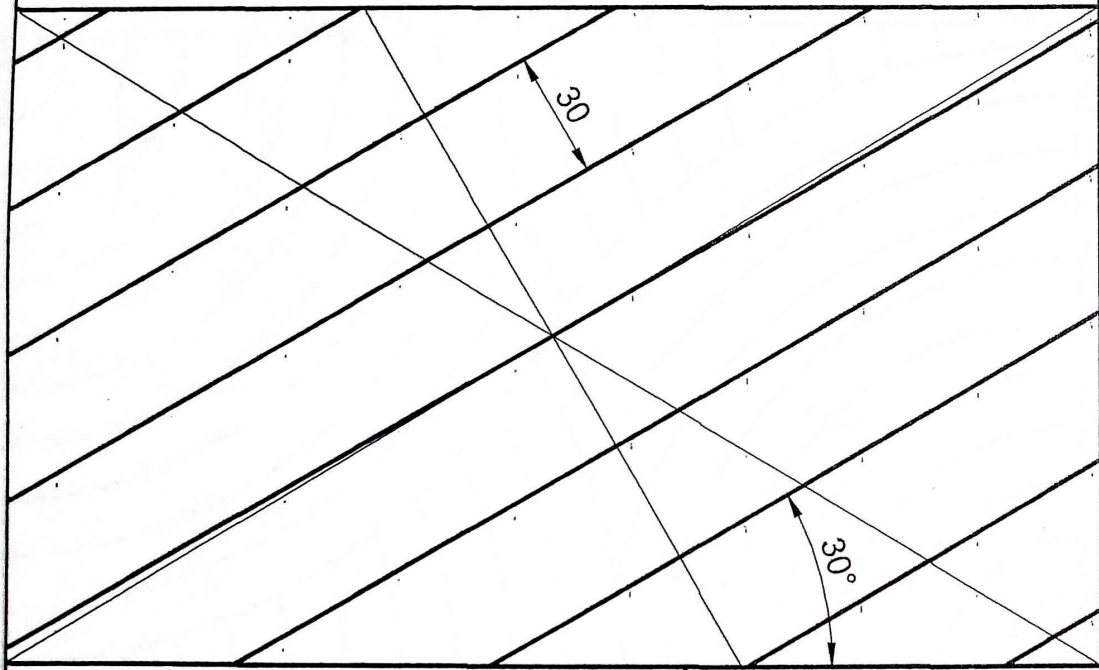


Draw a circle tangent to the following two circles (R=20mm)



6 equally spaced

8 equally spaced



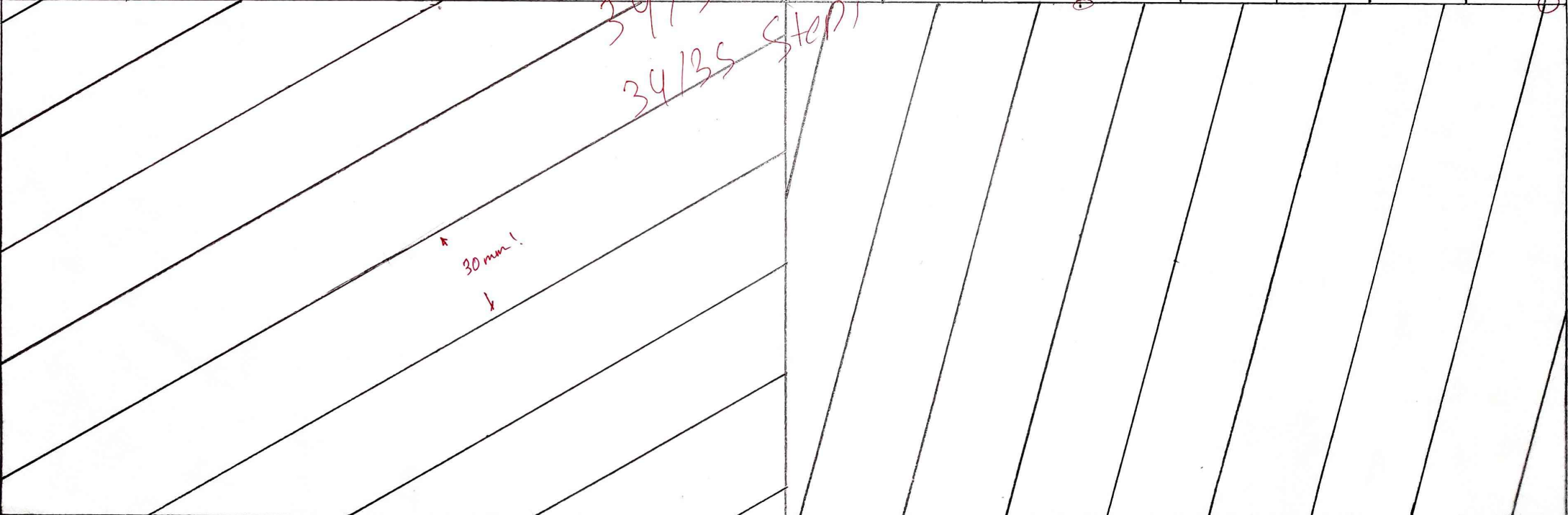
LINES

1:1

10/10 clean lines
 10/10 lettering
 10/10 lines
 34/35 accuracy
 34/35 steps

98

 100



LINES

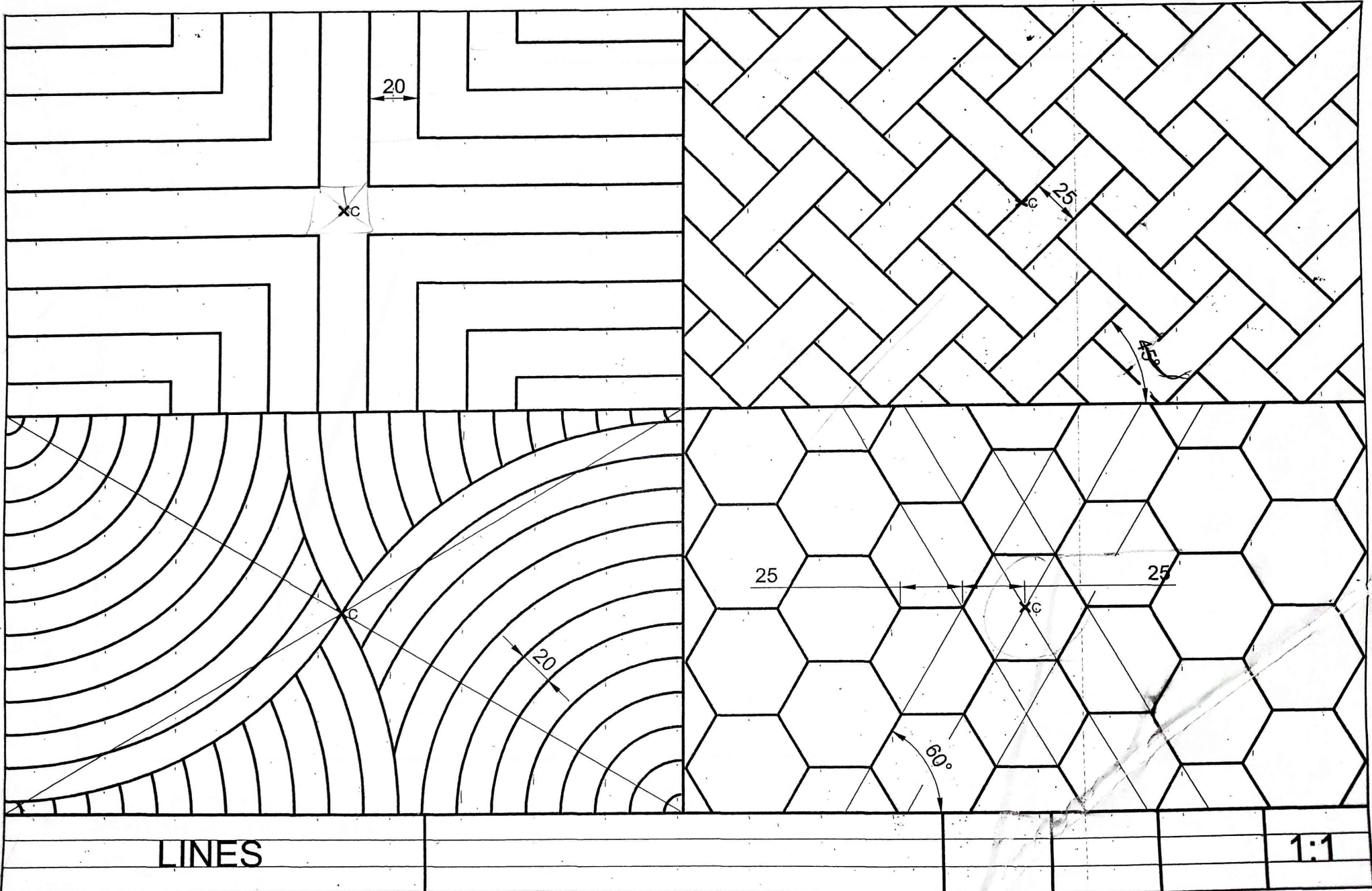
OBAYDA SARRAJ

1211128

R10

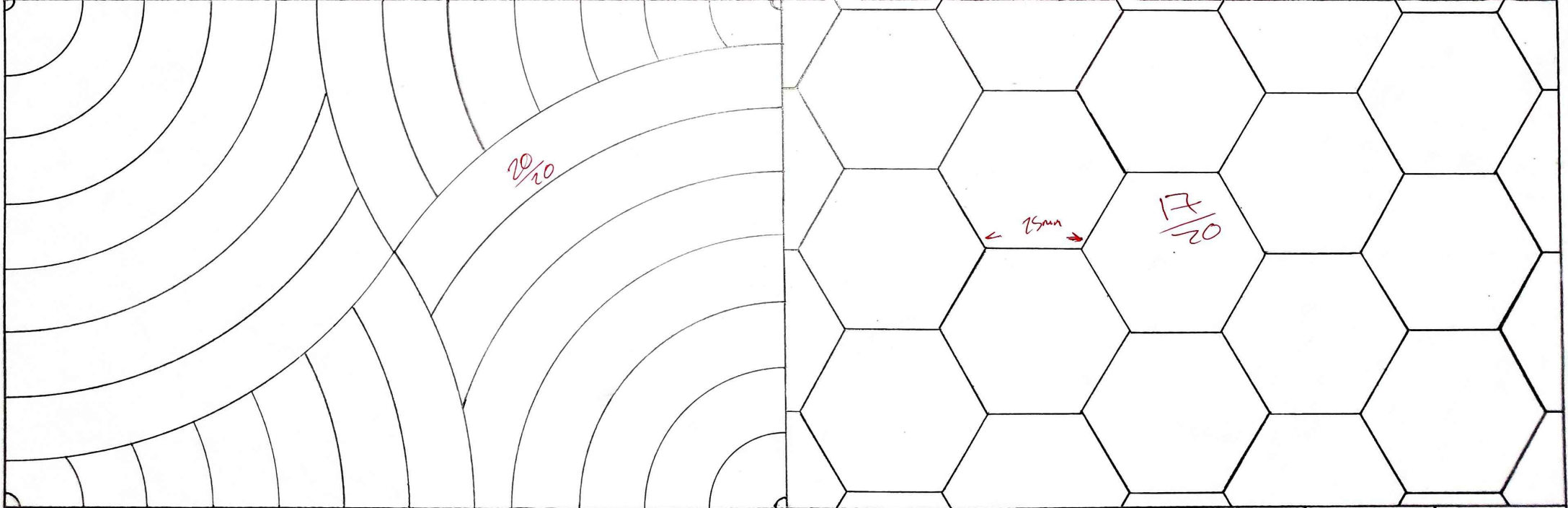
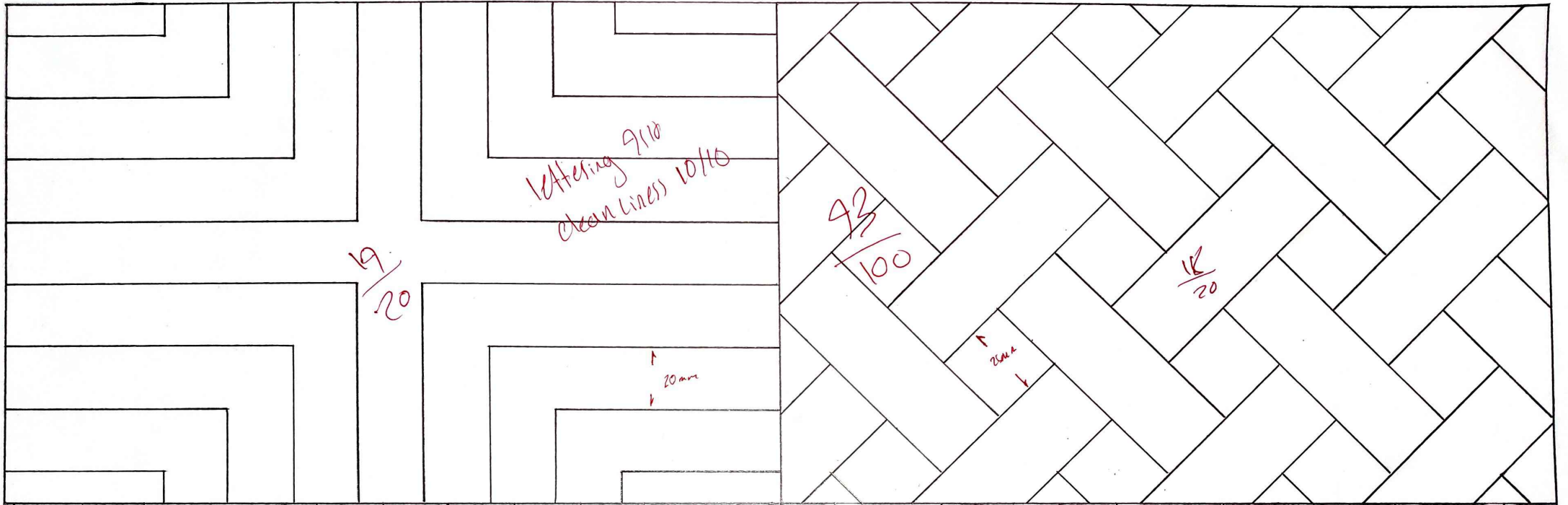
23/9/2021

1:1



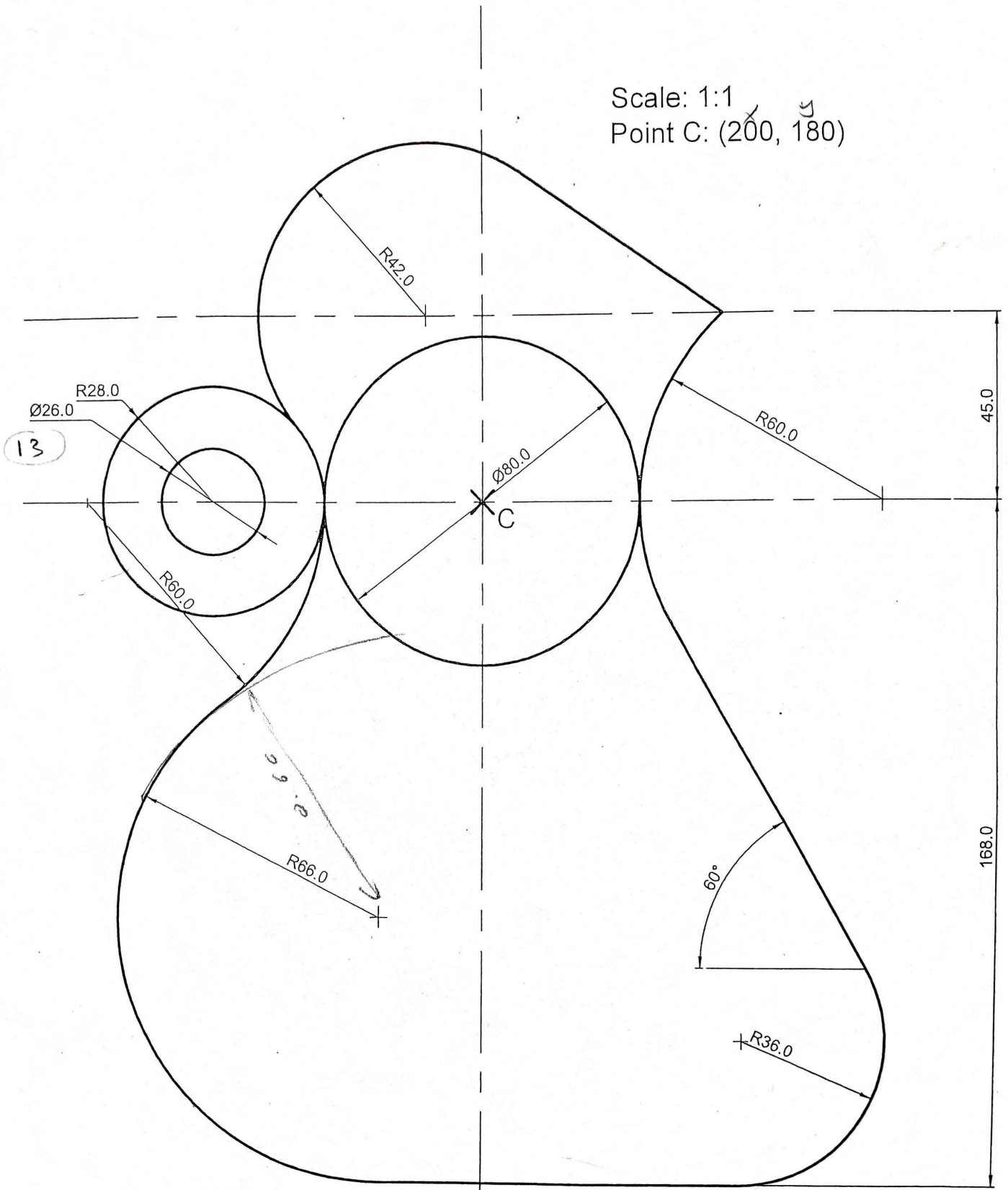
LINES

1:1



LINES	OBAYDA SARRAJ	1211128	R10	30/9/2021	1:1
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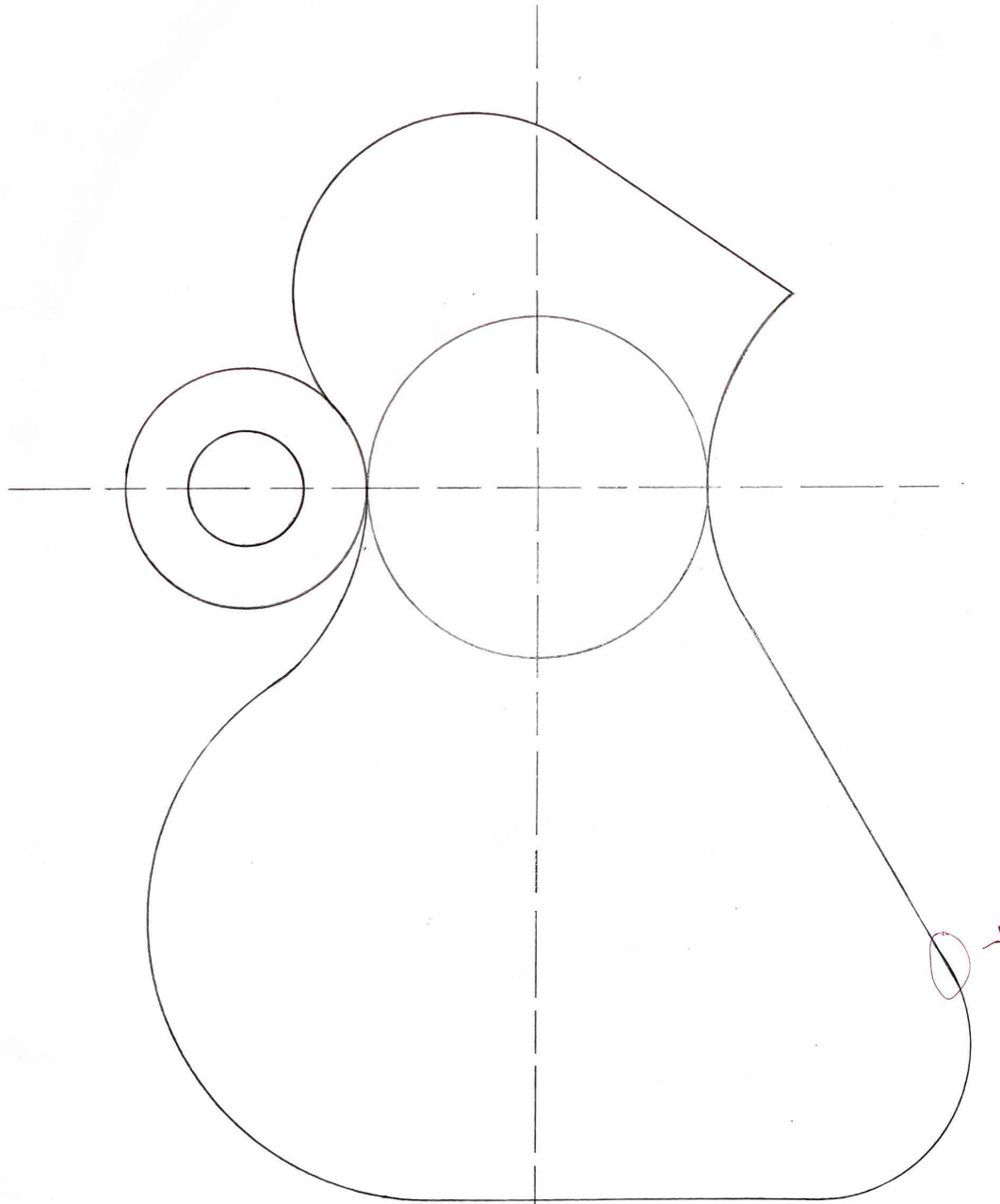
Scale: 1:1
Point C: (200, 180)



13

TANGENTS

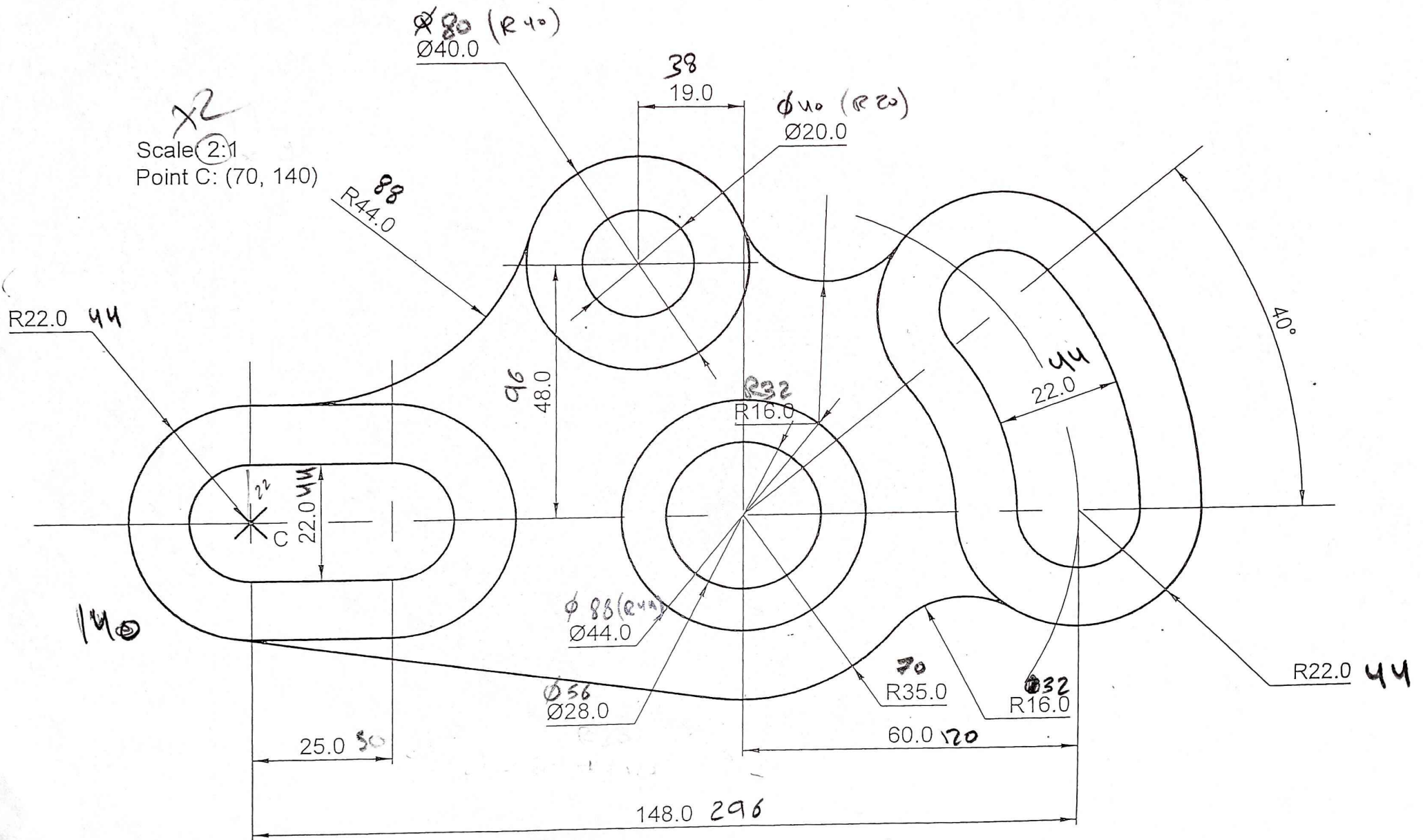
60

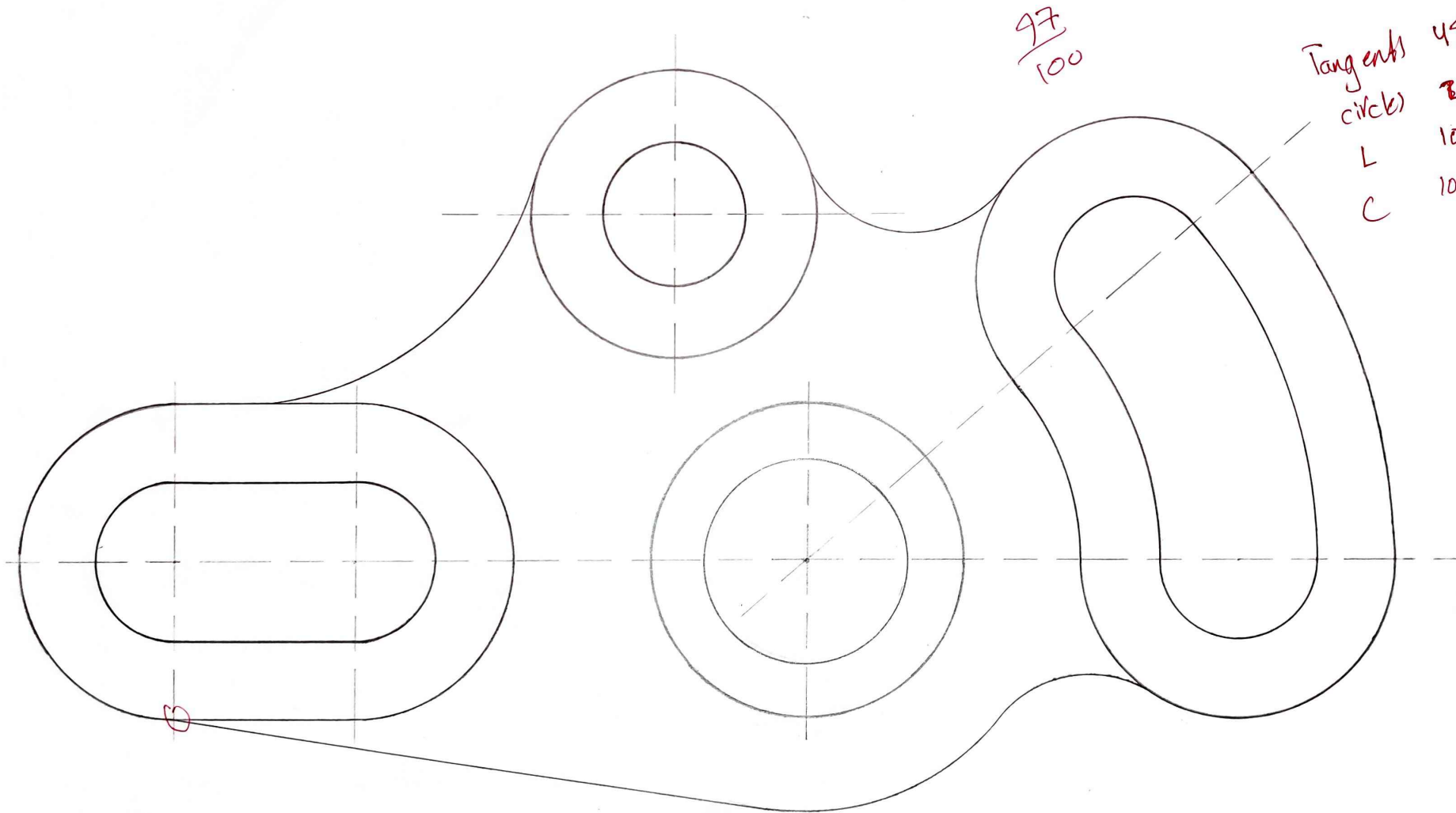


Tangents 14/150
 circle 15/15
 lines 15/15
 C+L 19/20

98
 100

Scale 2:1
Point C: (70, 140)





97
100

Tangents
circles
L 49/50
C 28/30
10/70
10/110

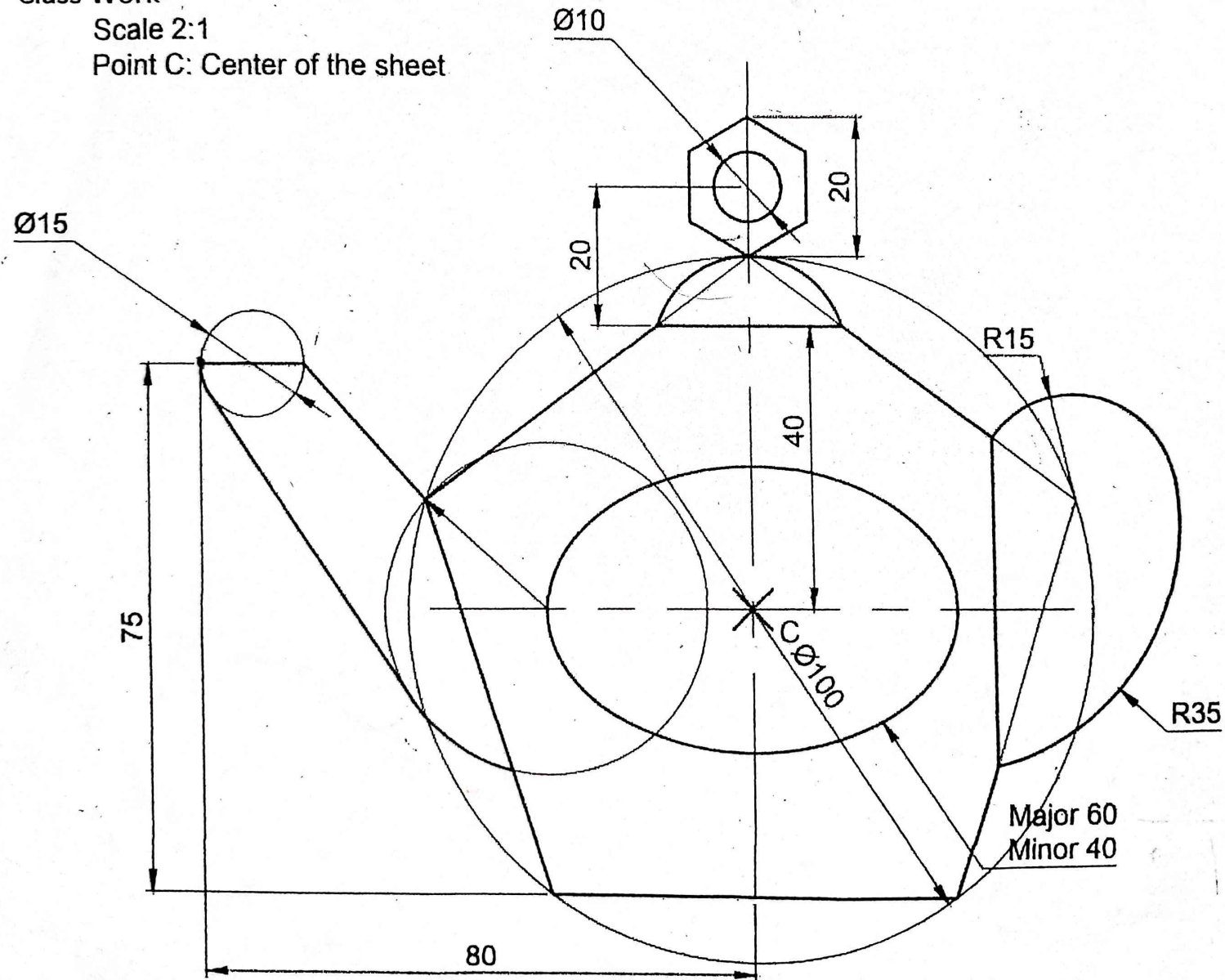
TANGENTS	OBAYDA SARRAJ	1211128	R10	7/10/2021	2:1
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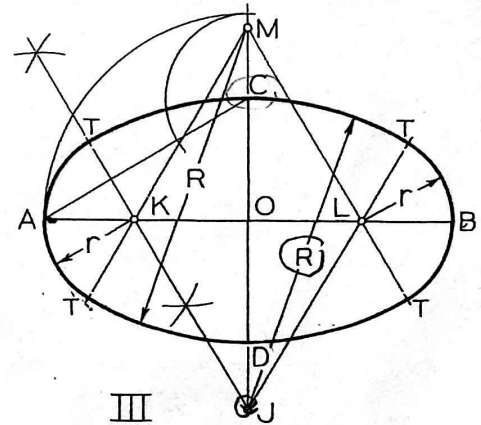
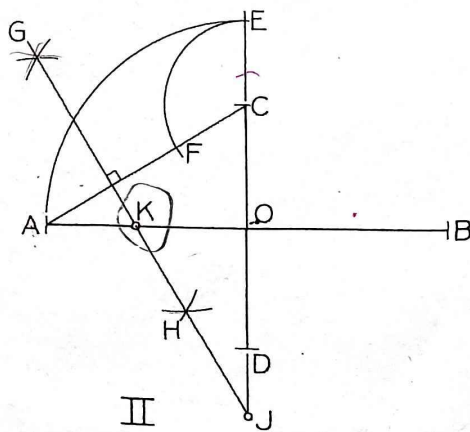
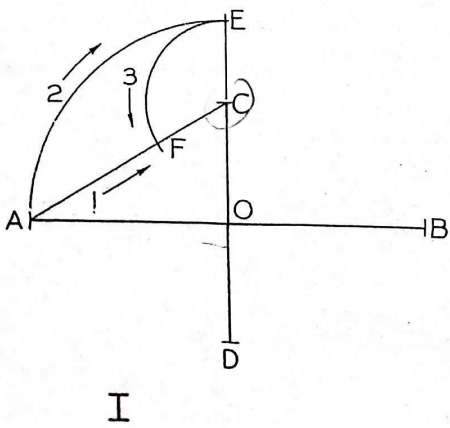
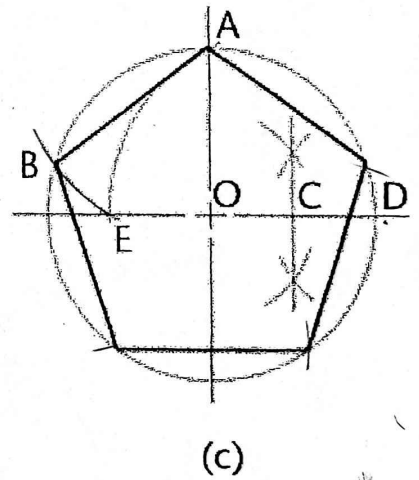
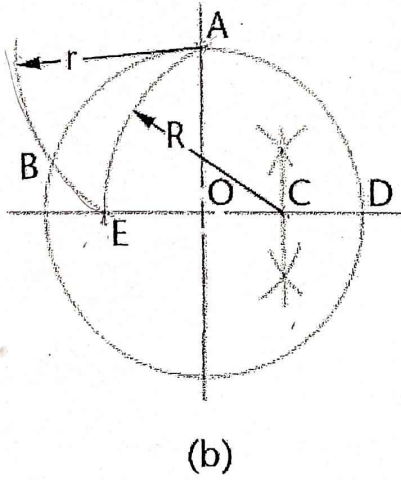
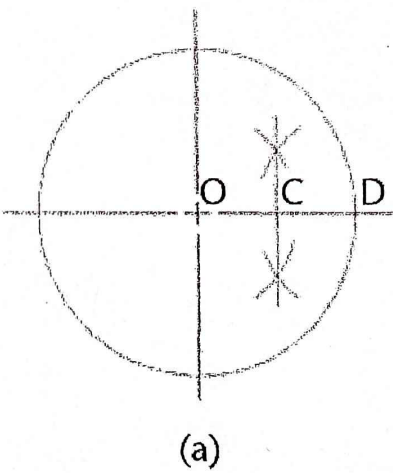
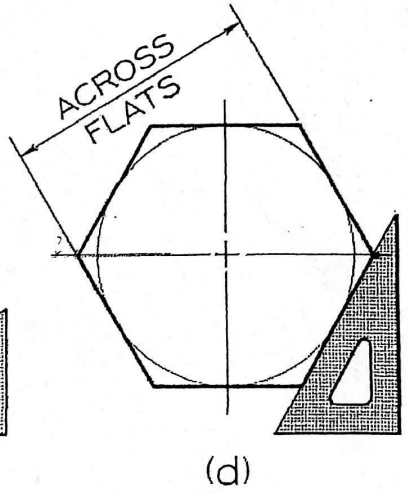
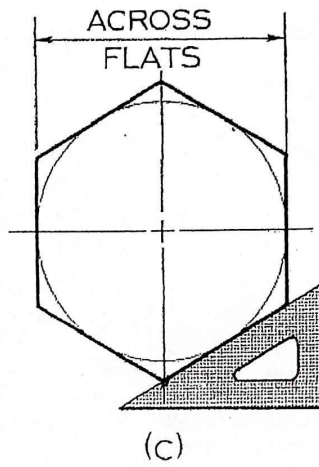
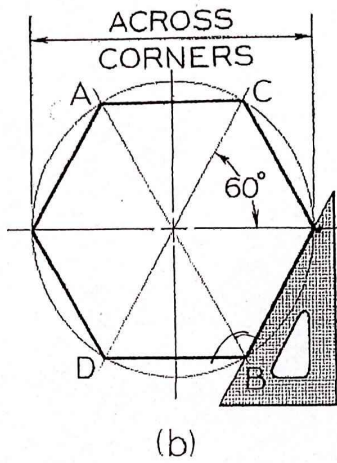
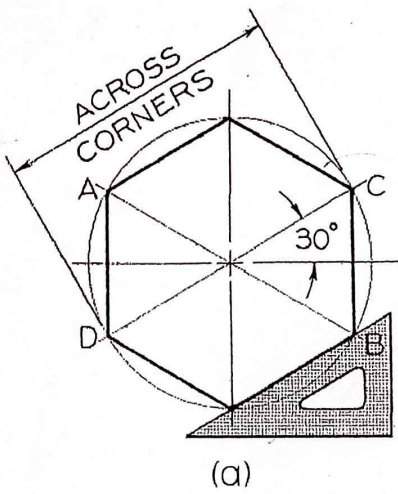
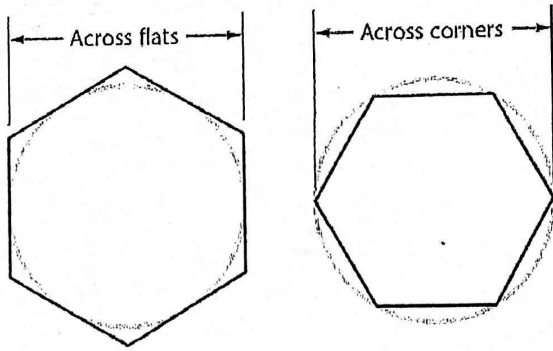
POLYGONS

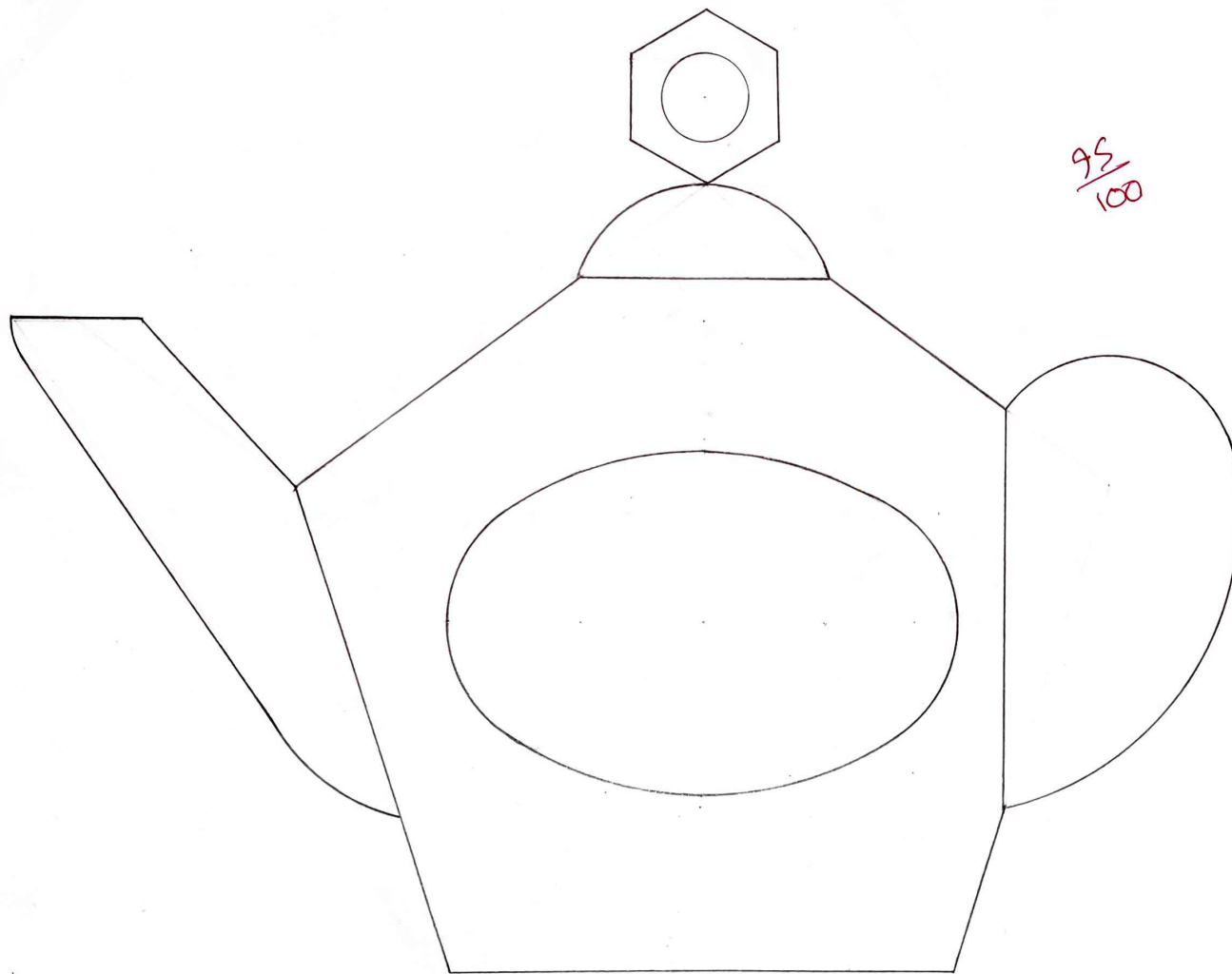
Class Work

Scale 2:1

Point C: Center of the sheet







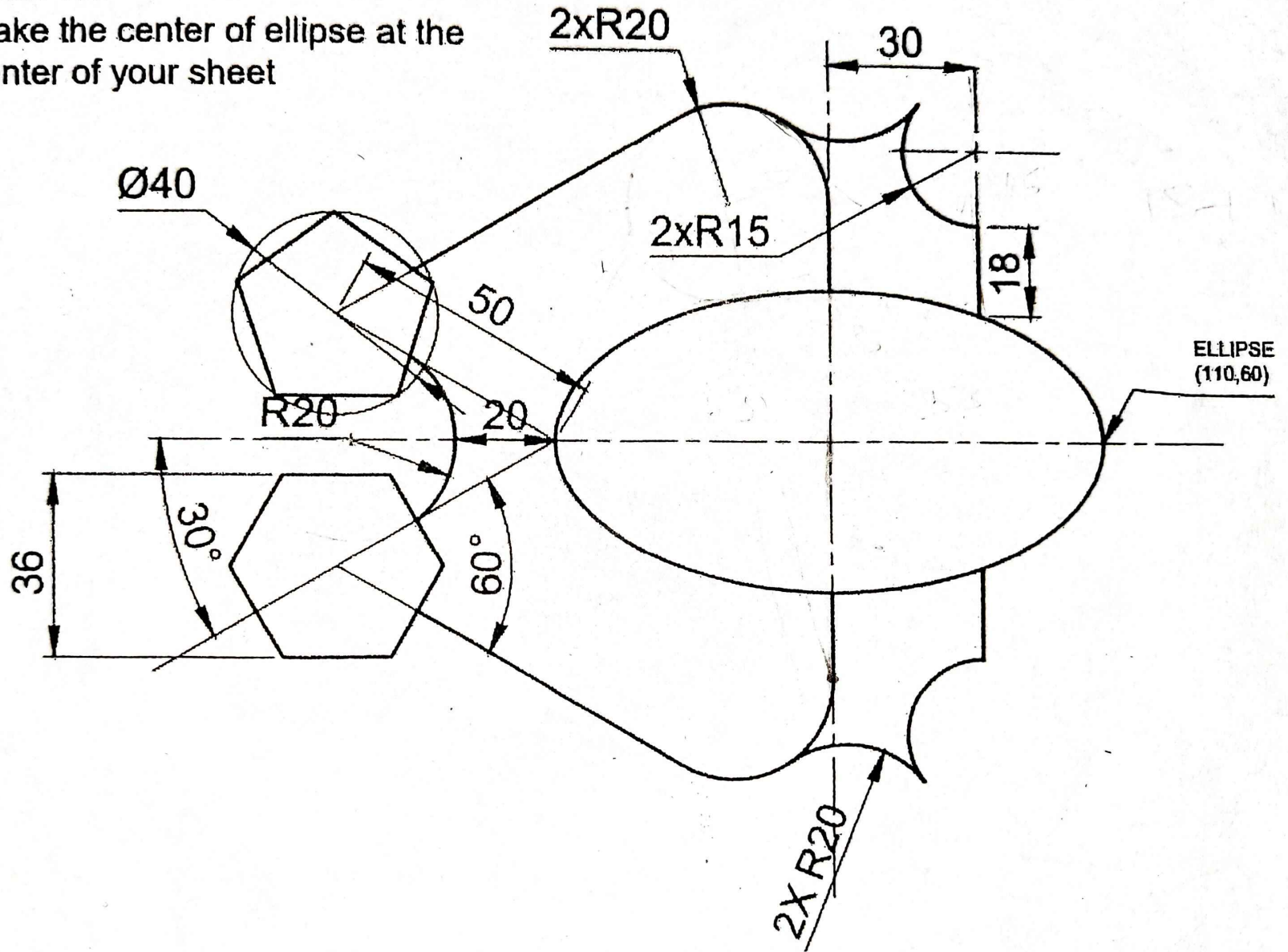
95/100

ellipse 23
pentagon 14
hex 10
3Point 9
head 10
hand 10
C 9
L 10

Home Work

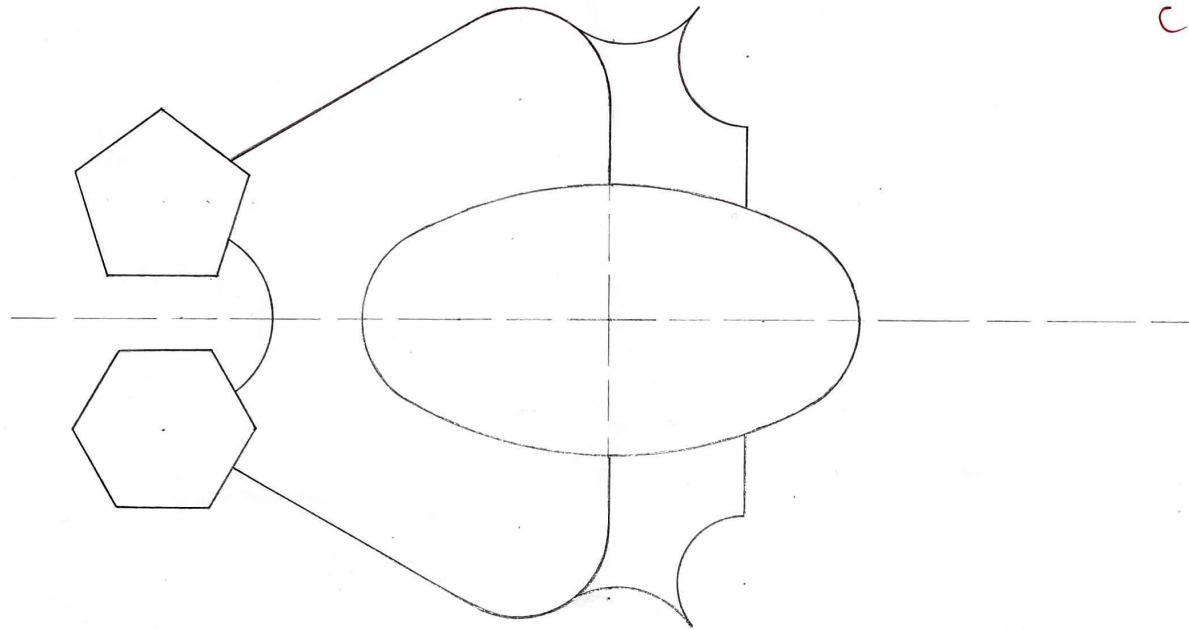
scale 1:1

make the center of ellipse at the center of your sheet



96
/
100

0 77
L 9
C 6



POLYGONS

OBAYDA SARRAJ

1211128

R10

14/10/2021

1:1

Department of Mechanical and Mechatronics
Engineering
Engineering Drawing ENME121
Midterm Exam

Exam duration 2:30Hours:

1st Semester Oct 2021

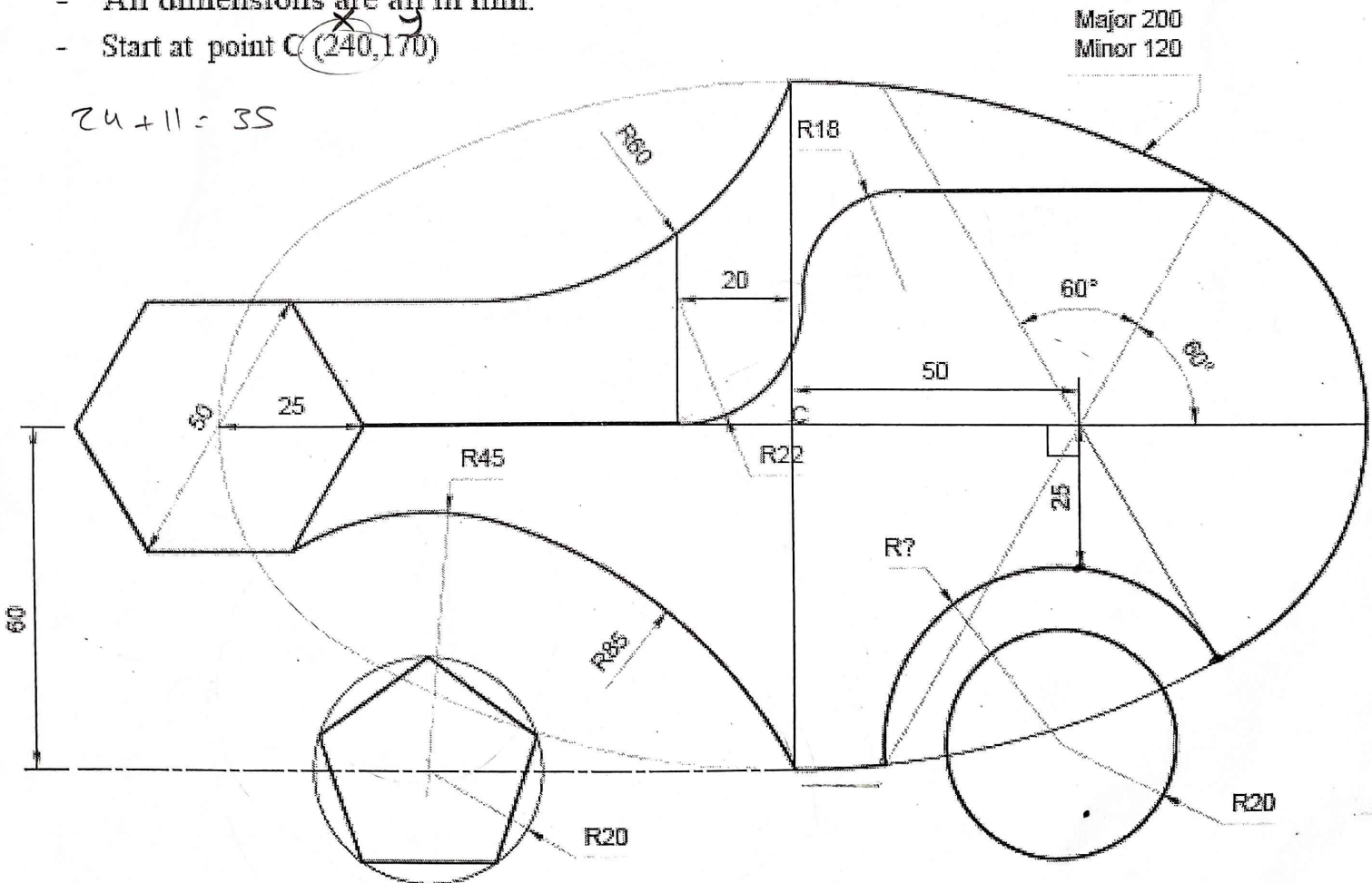
Problem 1

Using B3 sheet, draw the following figure with drawing instruments taking the scale of drawing as 1:1.

Note:

- All dimensions are all in mm.
- Start at point C (240,170)

$24 + 11 = 35$

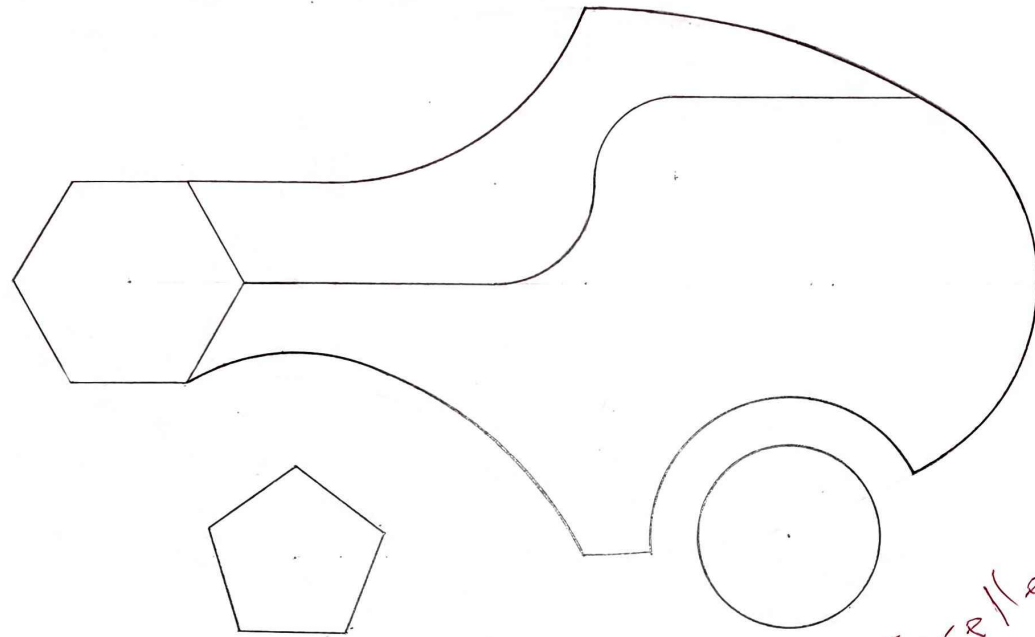


Problem 2:

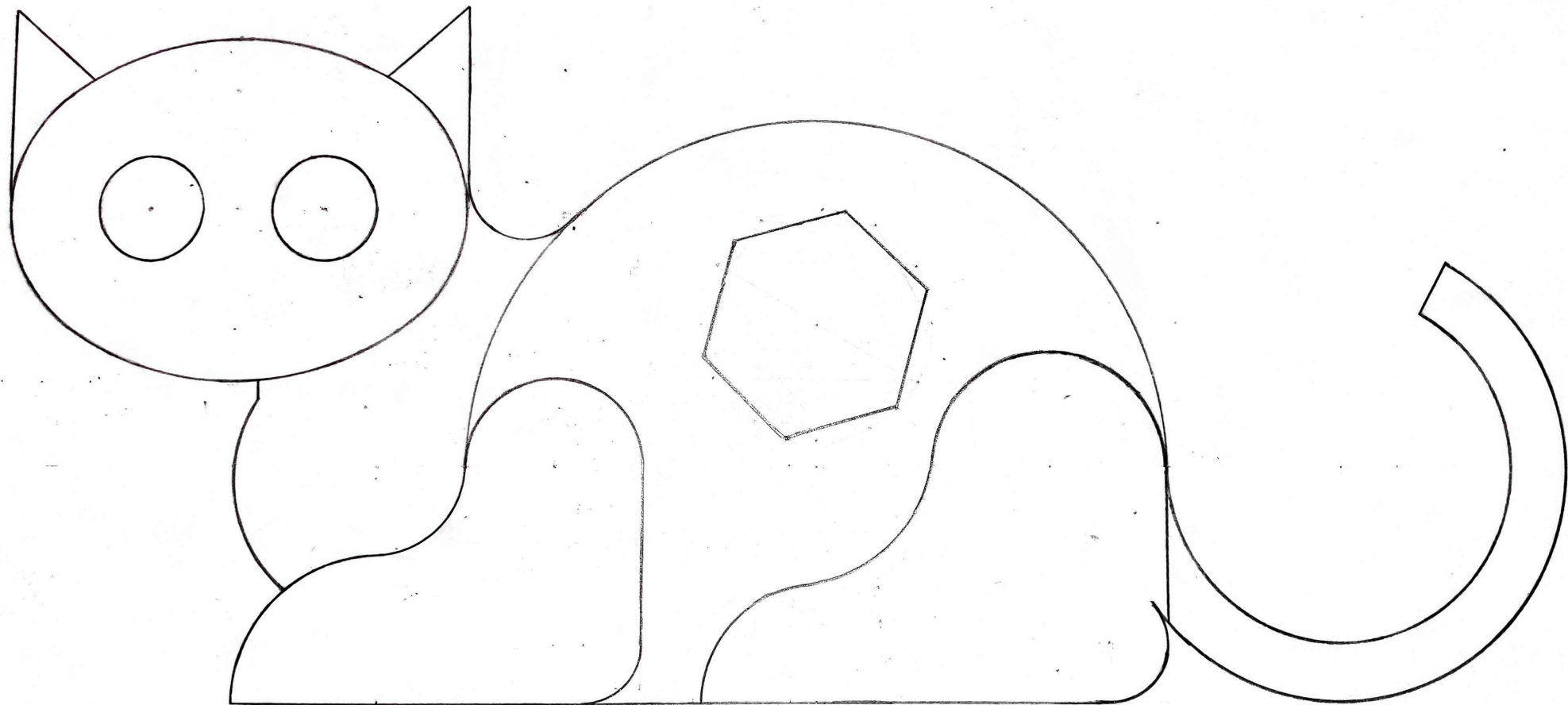
For the isometric drawing shown in the next page draw all necessary views

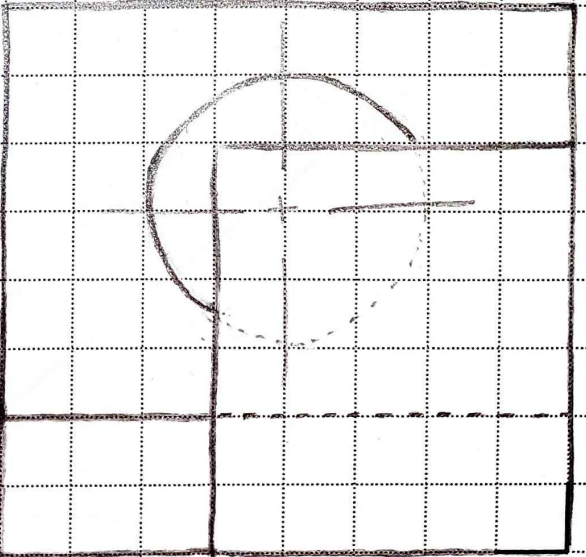
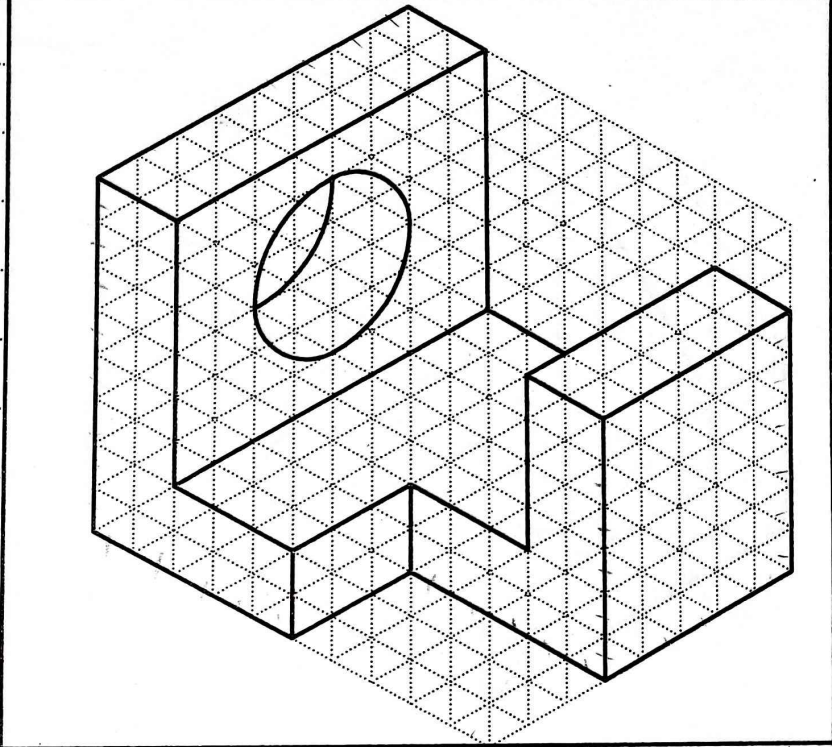
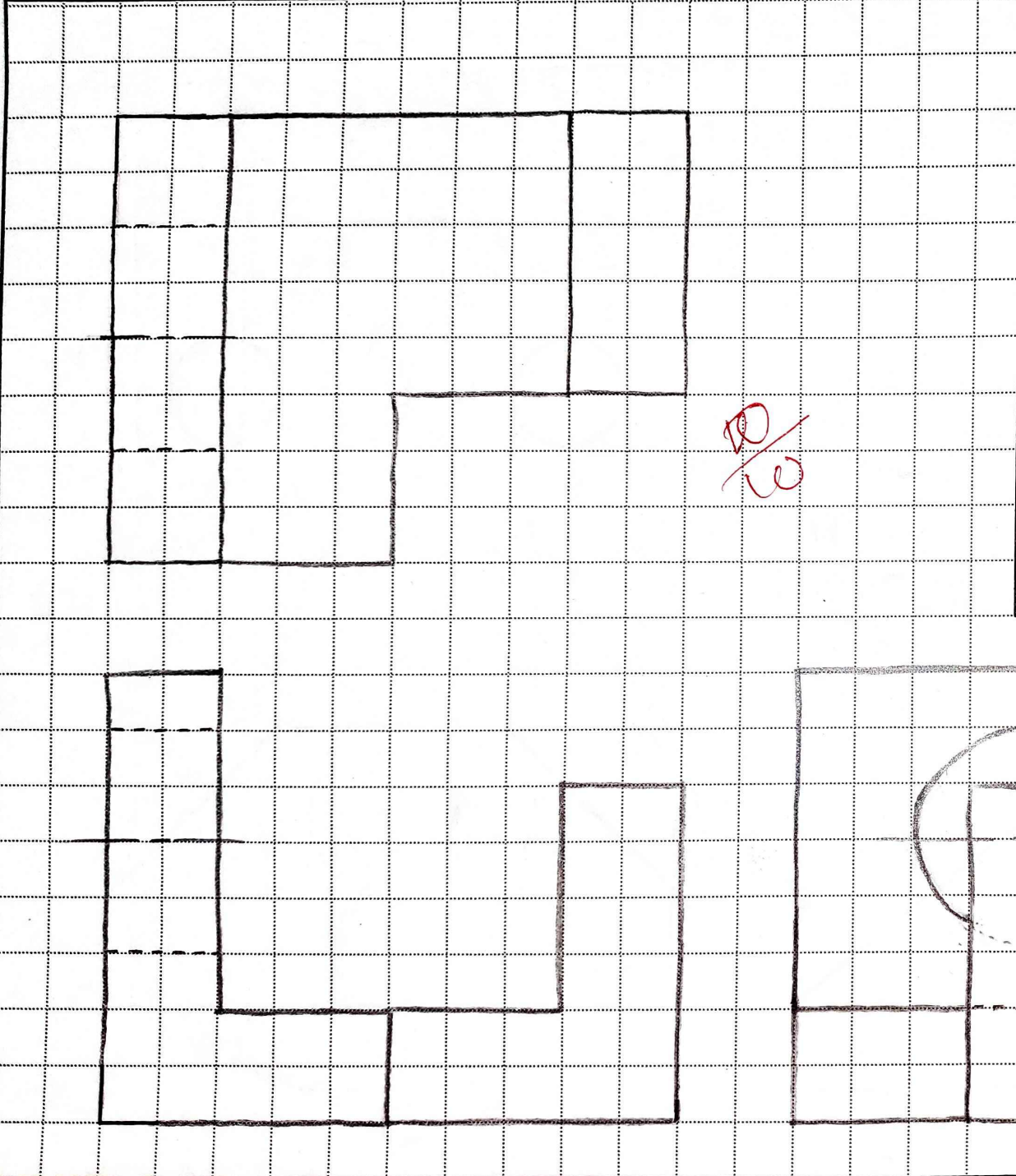
ELL	10	10
Hex	7	7
Pent	7	6
Wheel	7	7
UC	5	5
MC	7	7
LC	7	7
L+C	10	10
Total	60	

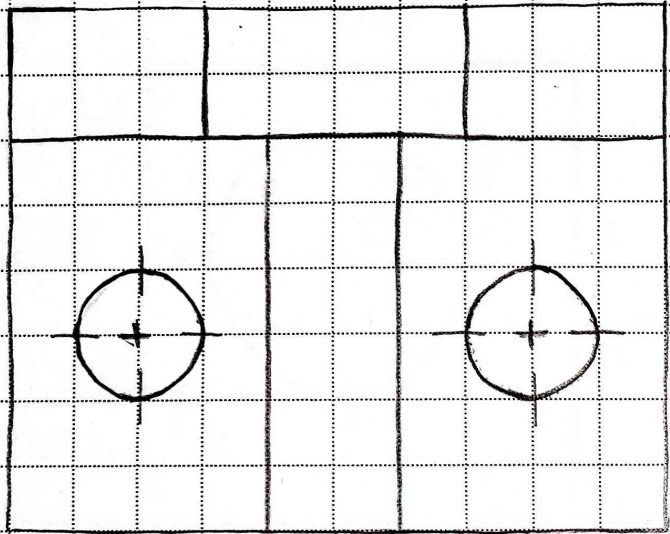
59/60



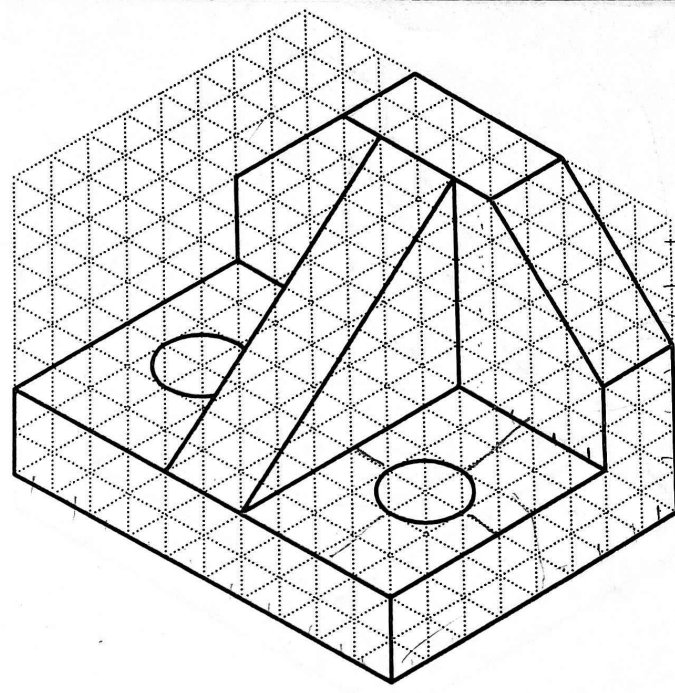
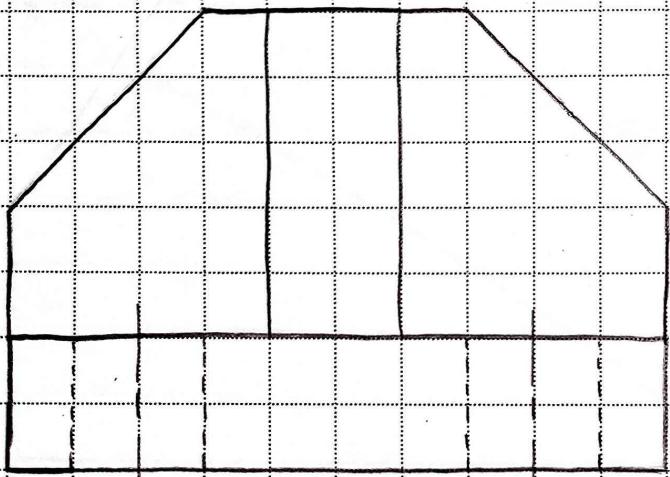
Excellent







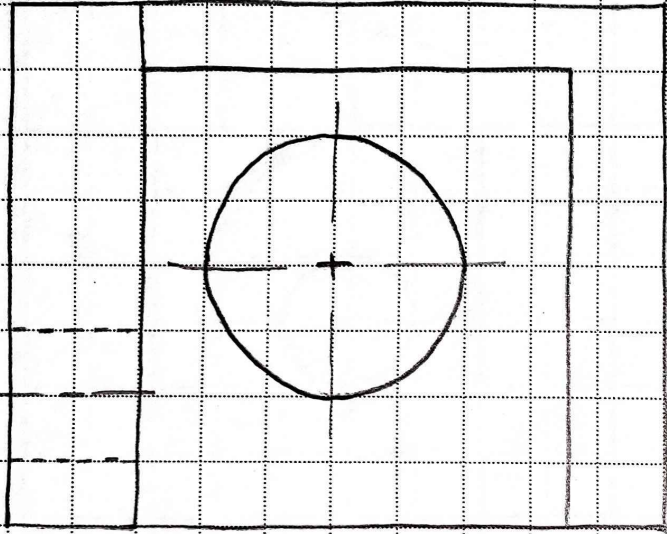
10
/
10



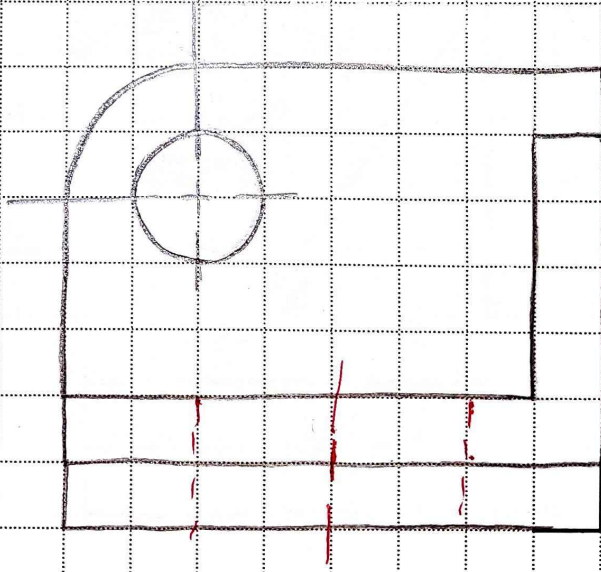
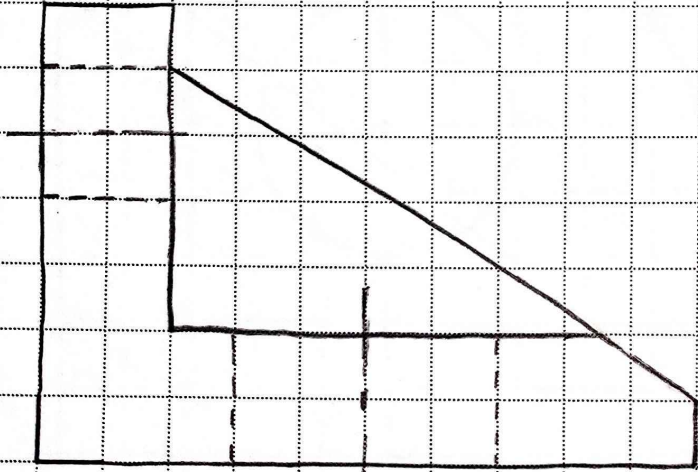
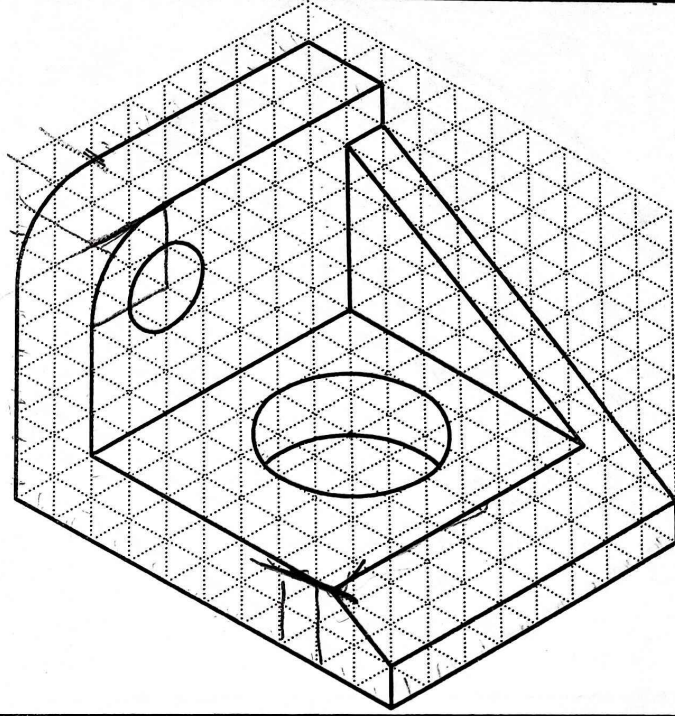
Name:

ID:

Sec:



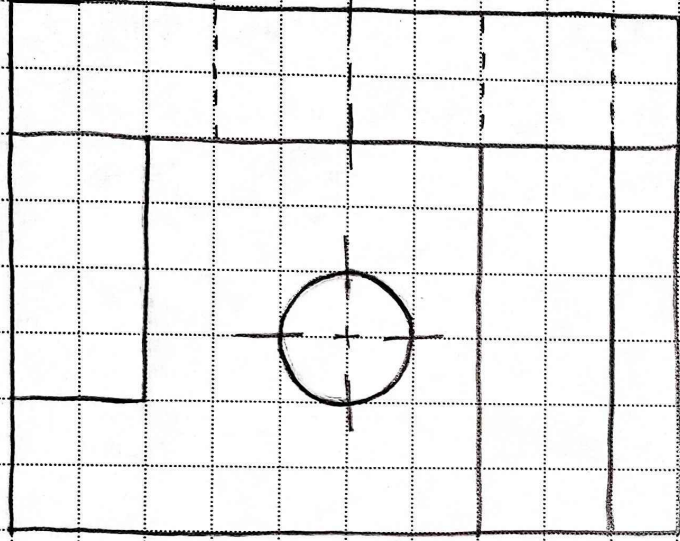
~~W.A.S~~
C.O



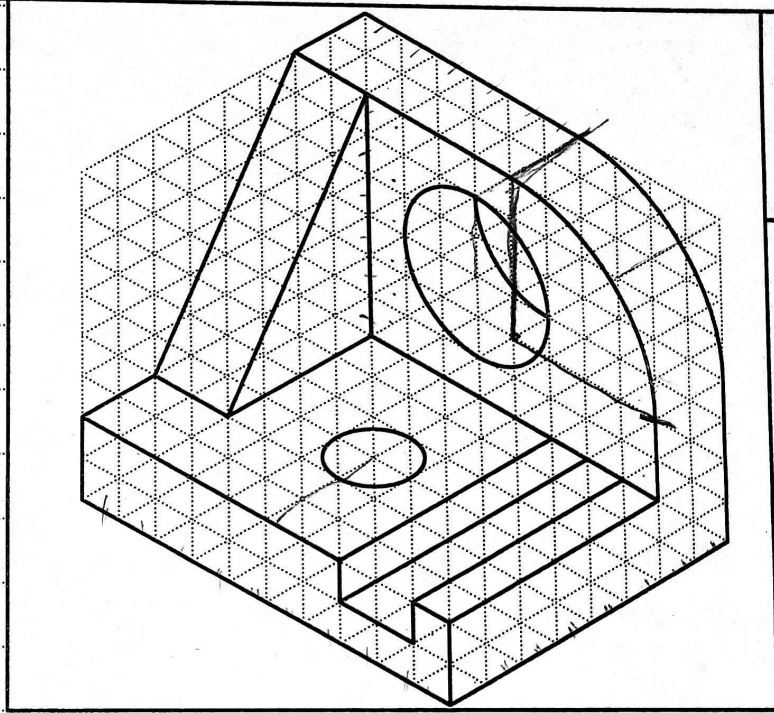
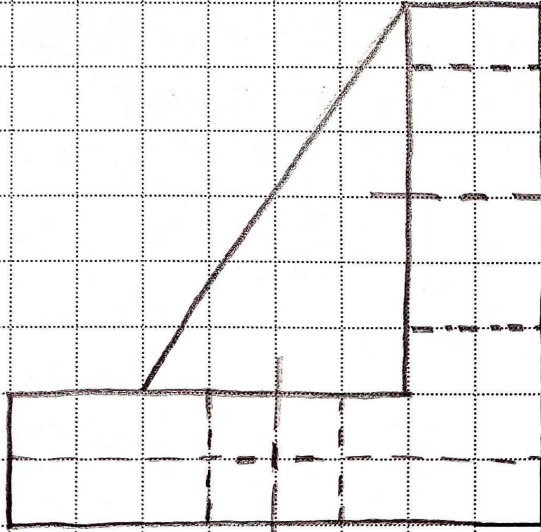
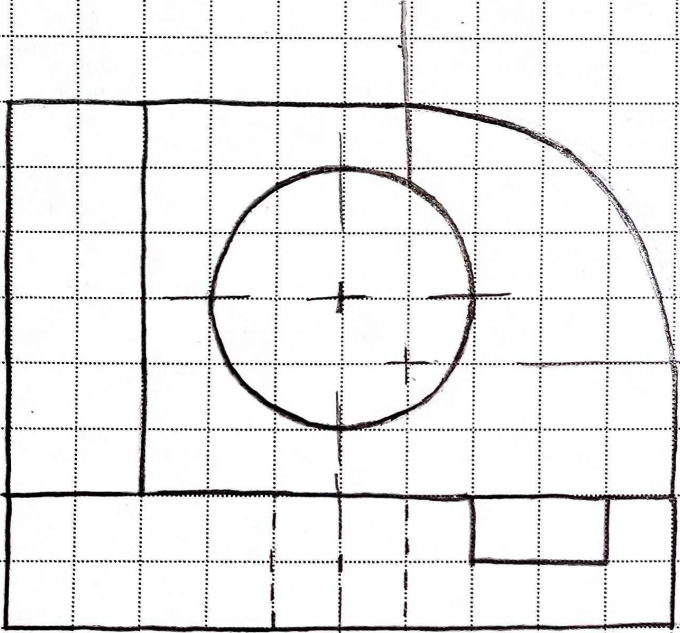
Name:

ID:

Sec:



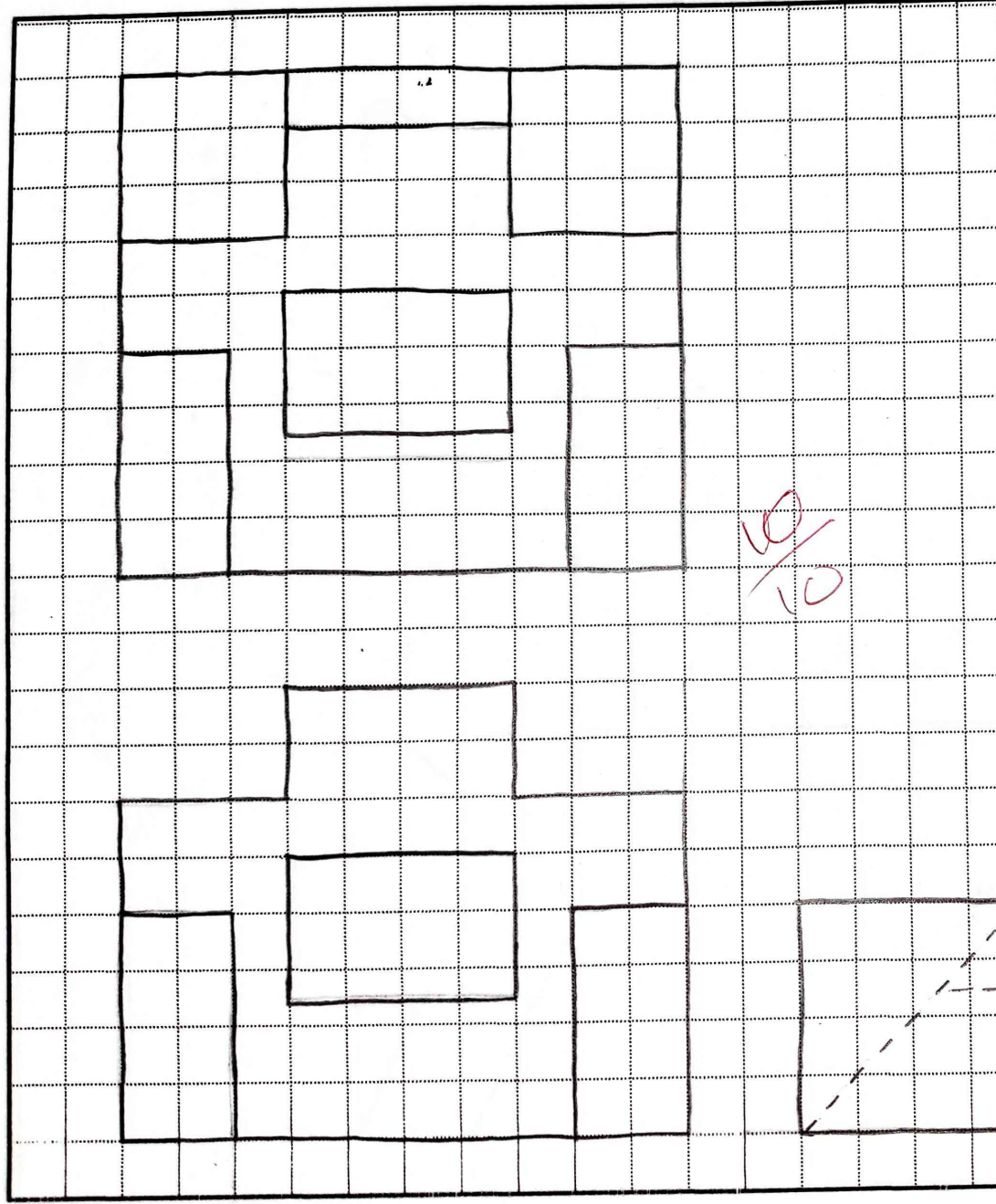
10/20



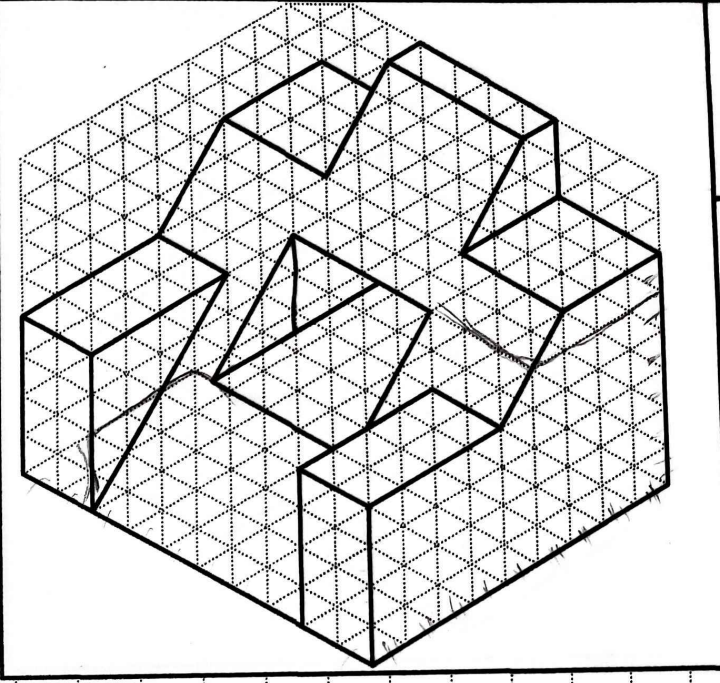
Name:

ID:

Sec:



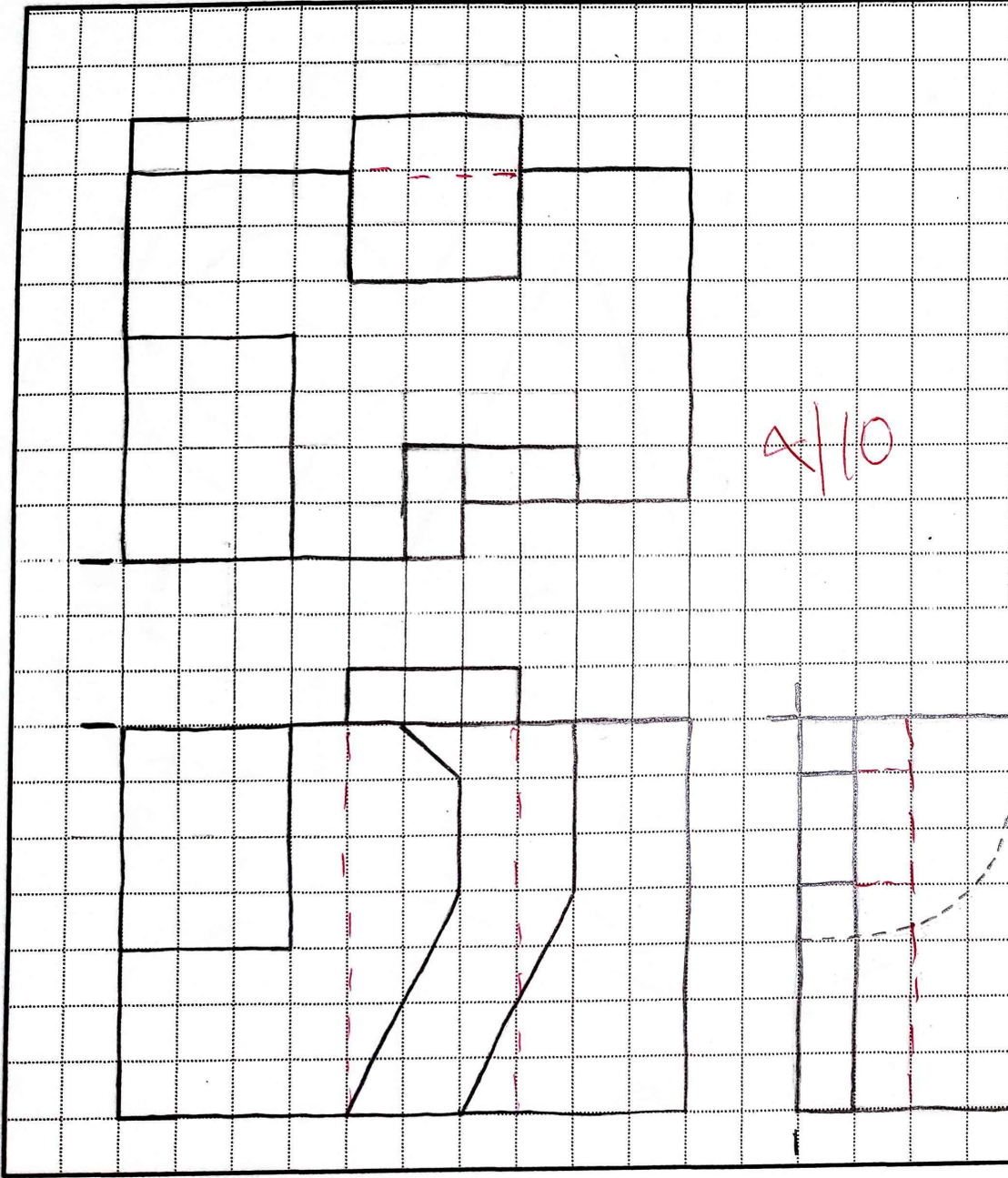
10/10



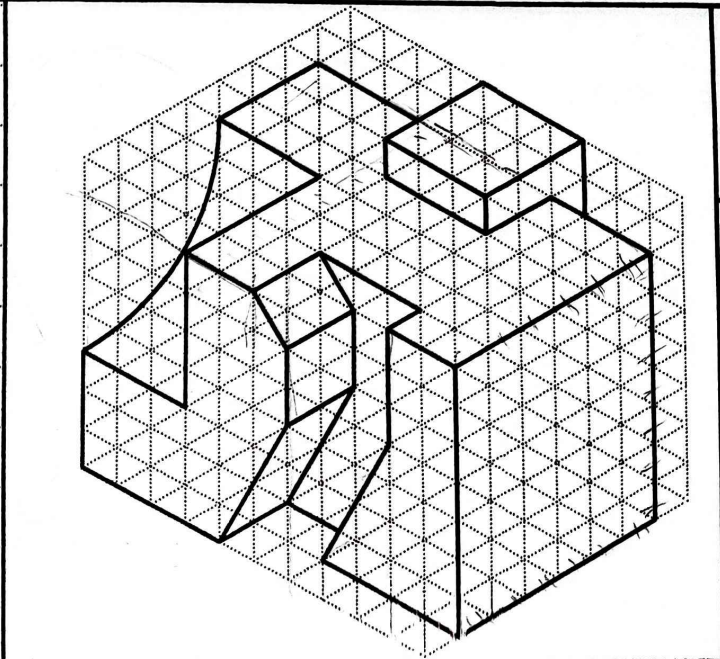
Name: OBAYDA SARRAJ

ID: 1211128

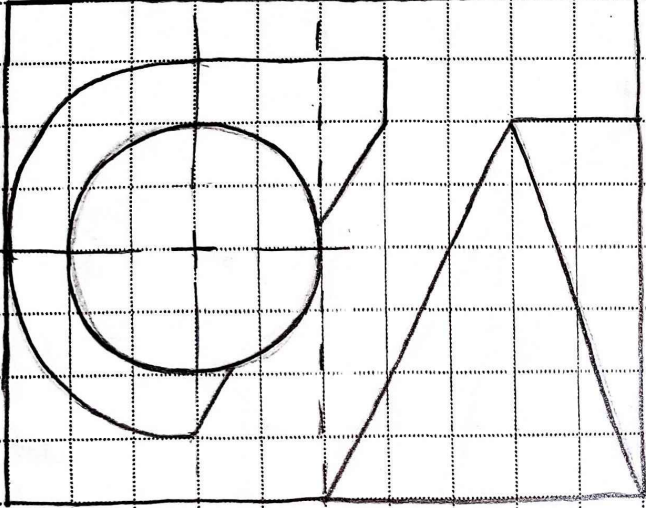
Sec: R10



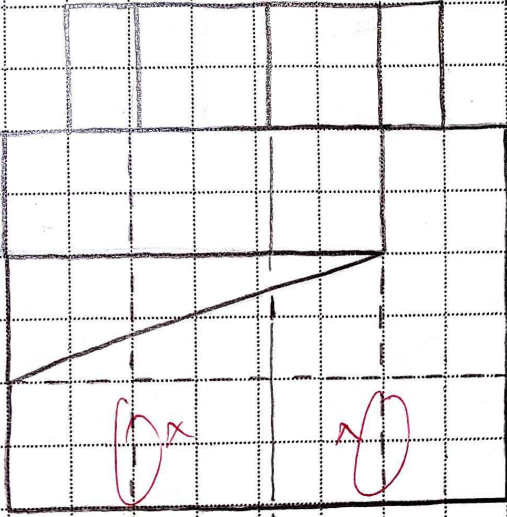
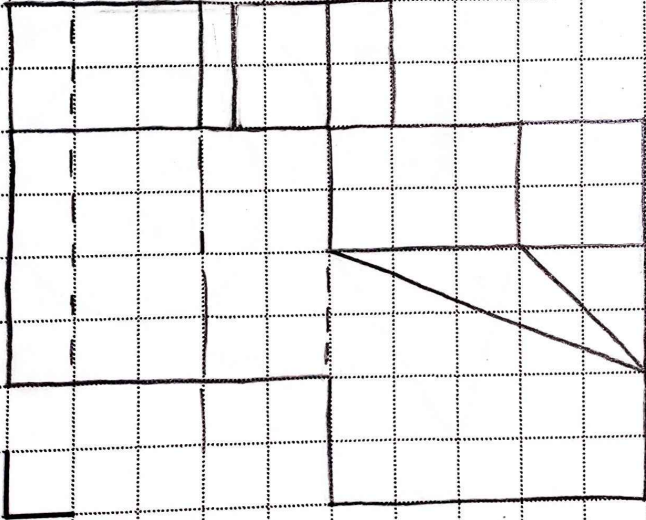
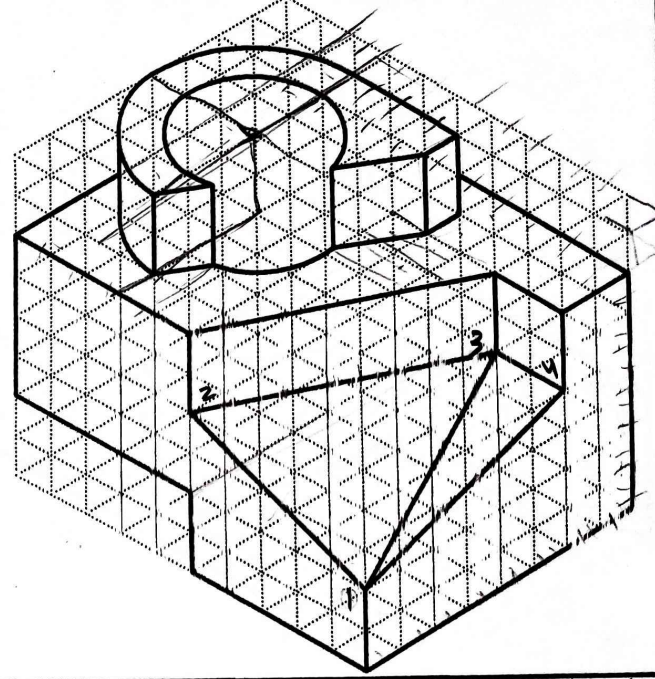
2/10



Name: _____ ID: _____ Sec: _____



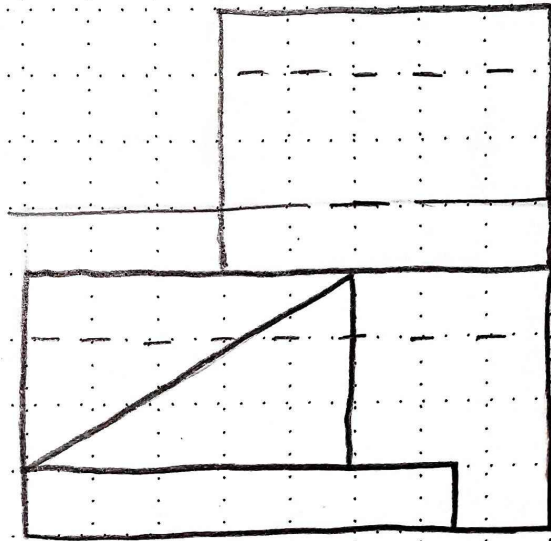
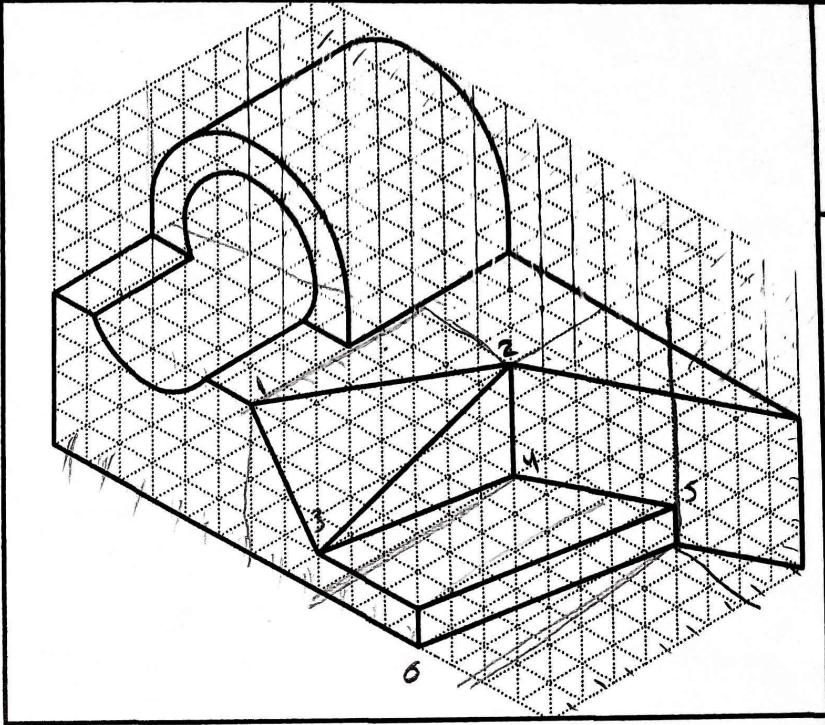
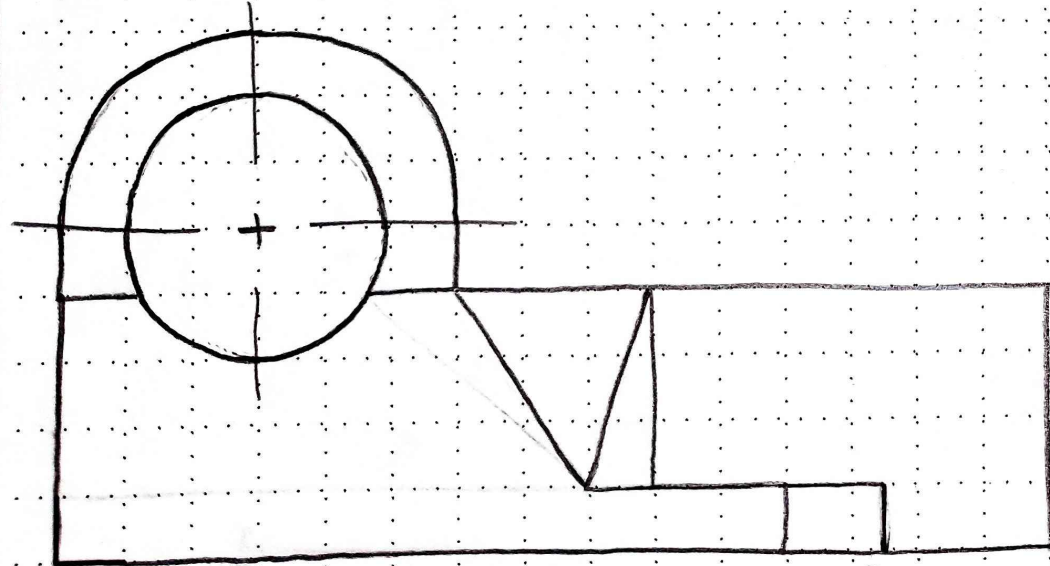
2/10



Name: _____ ID: _____ Sec: _____



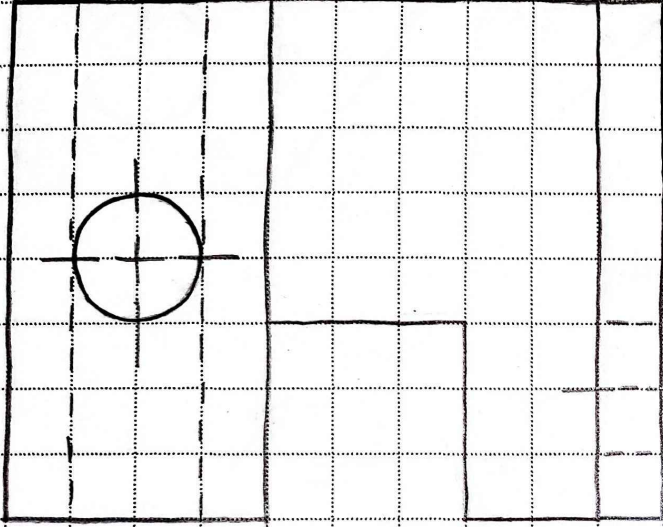
A/10



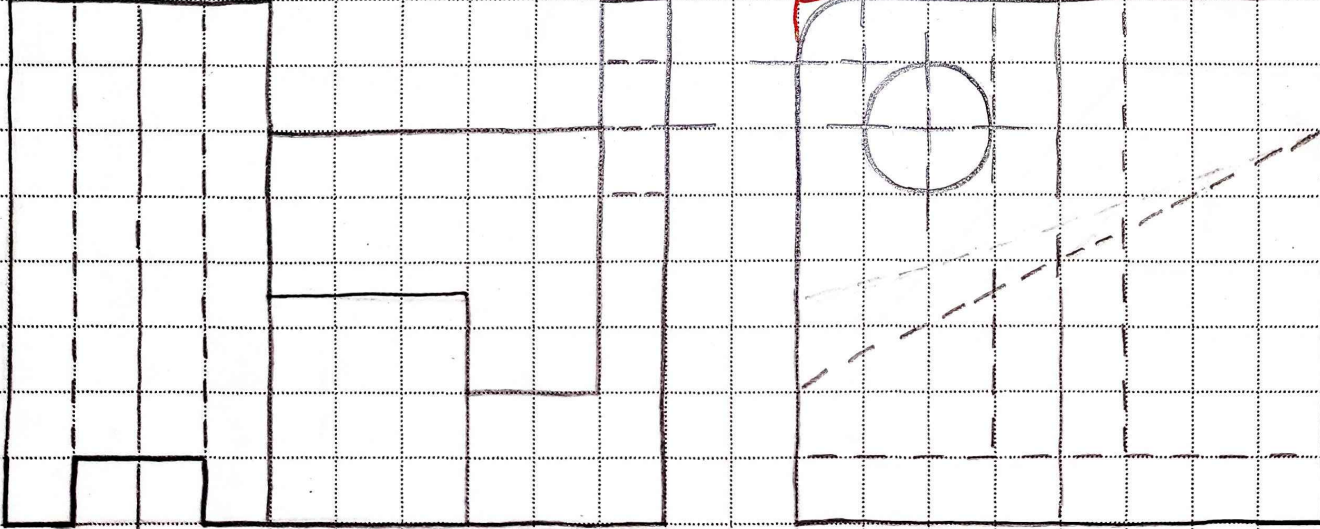
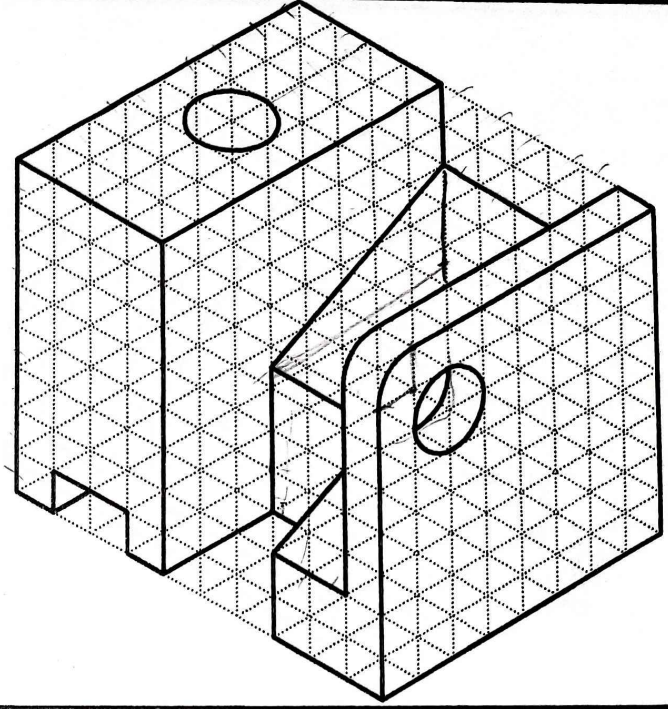
Sec:

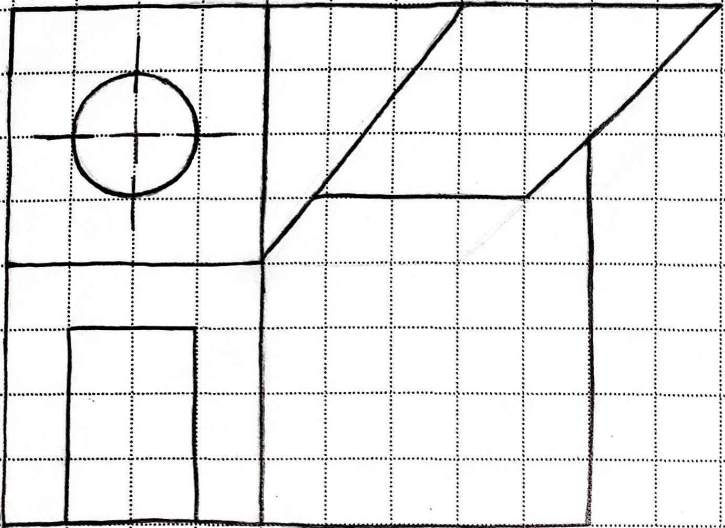
ID:

Name:

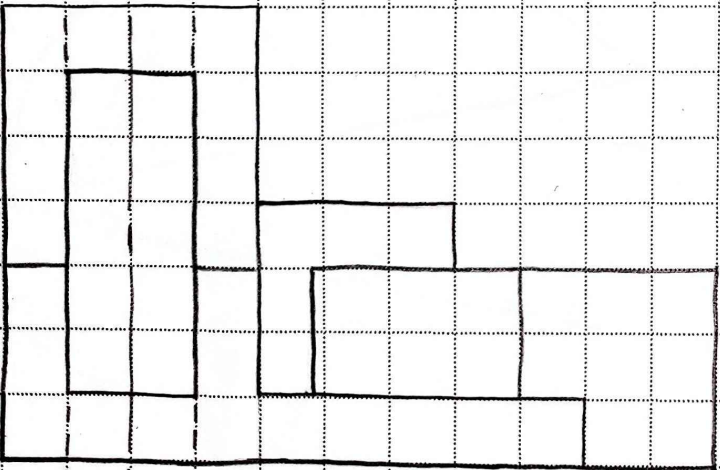
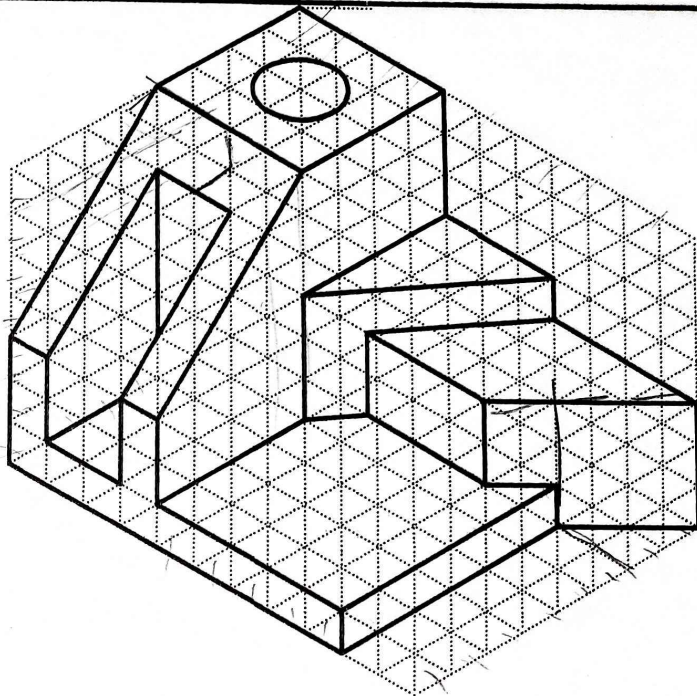


A.S/10





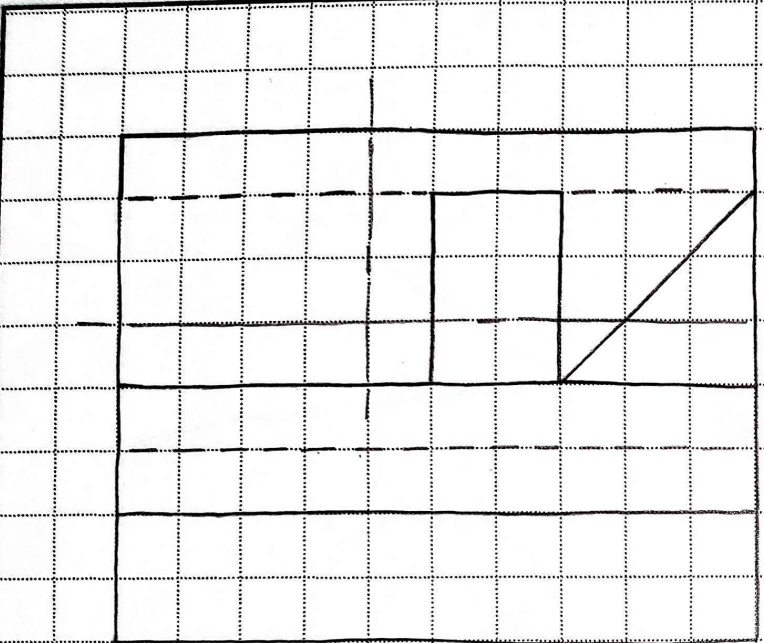
W/H



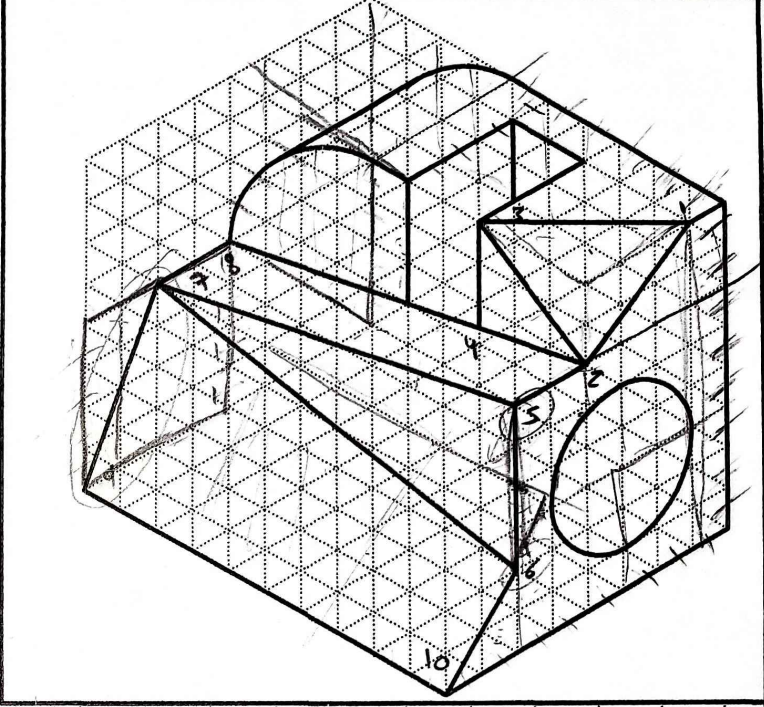
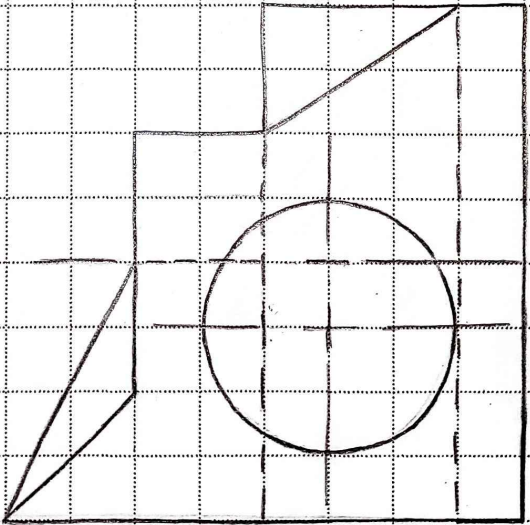
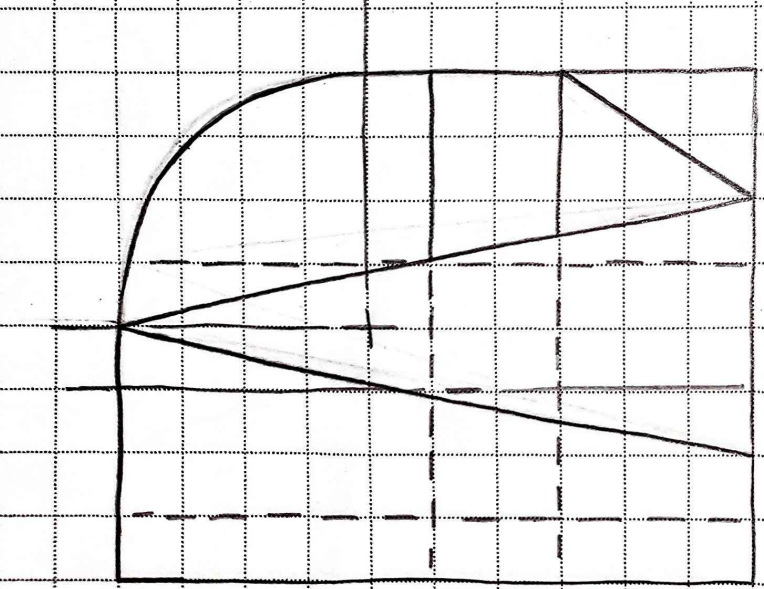
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ID:

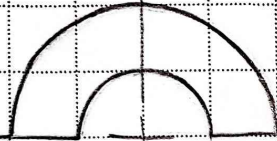
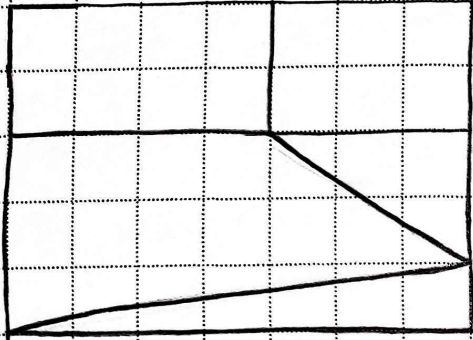
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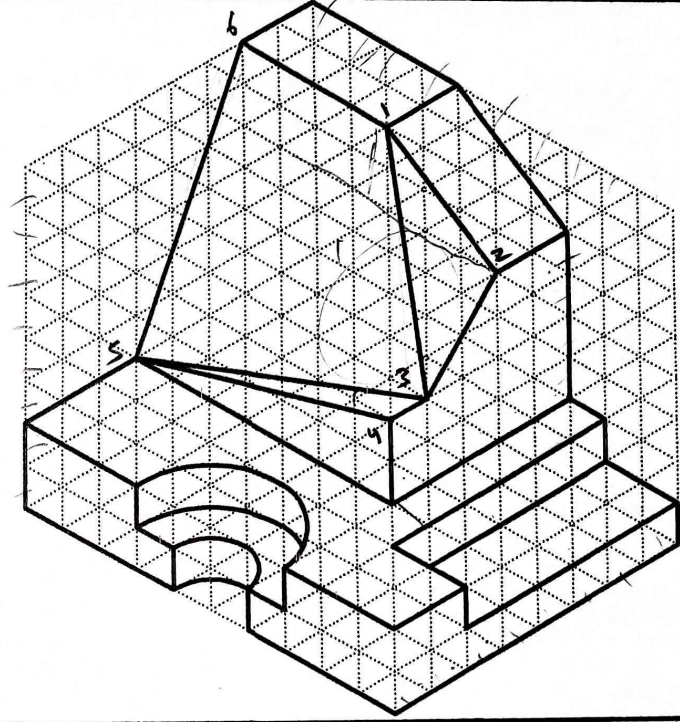
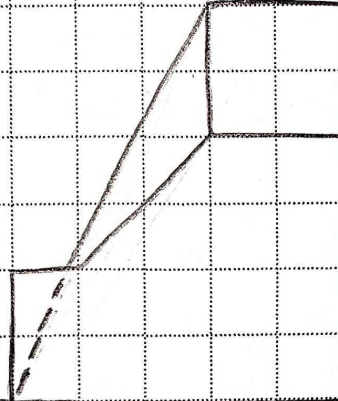
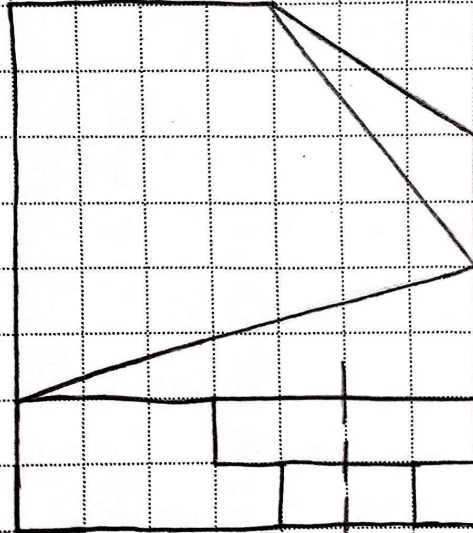
10/10



Name: _____ ID: _____ Sec: _____



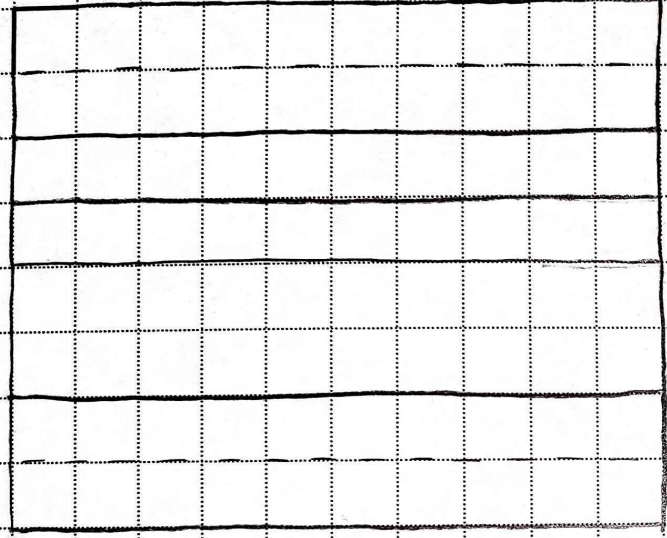
10/10



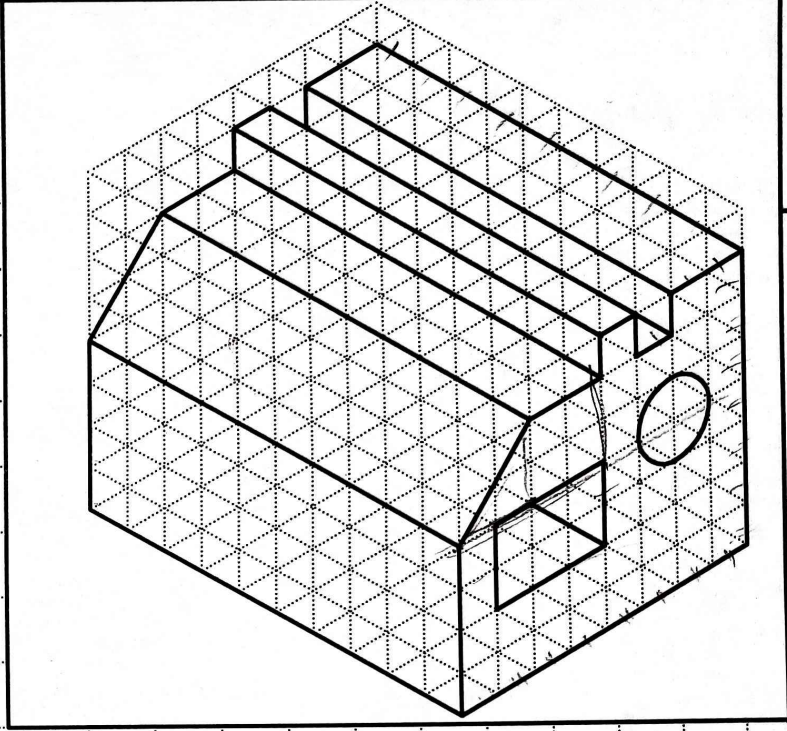
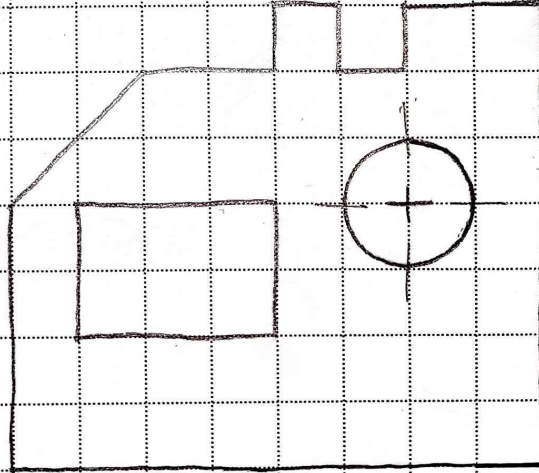
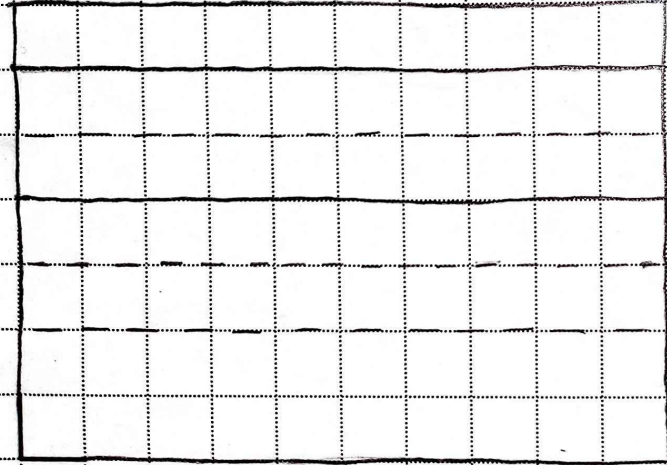
Name:

ID:

Sec:



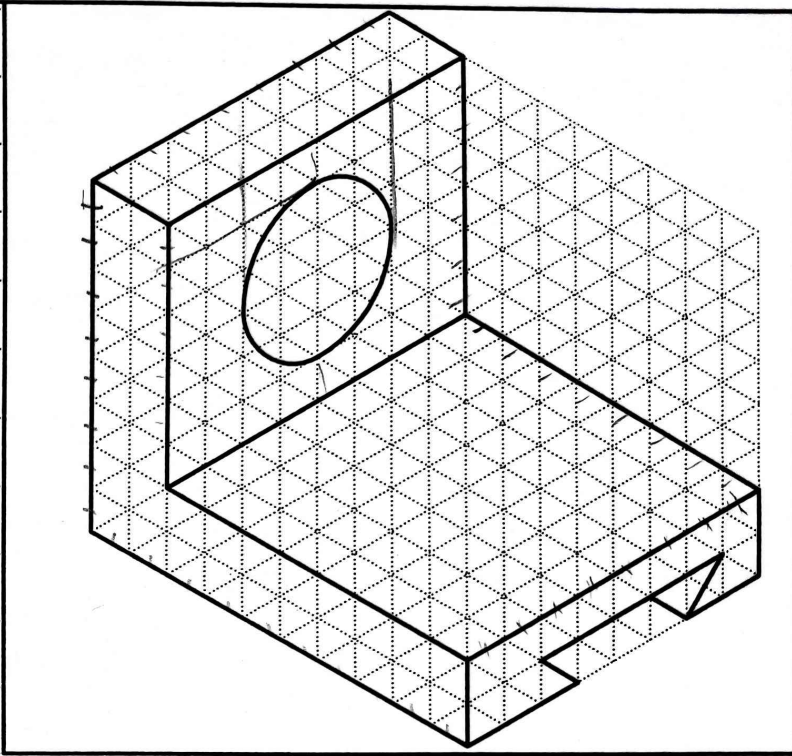
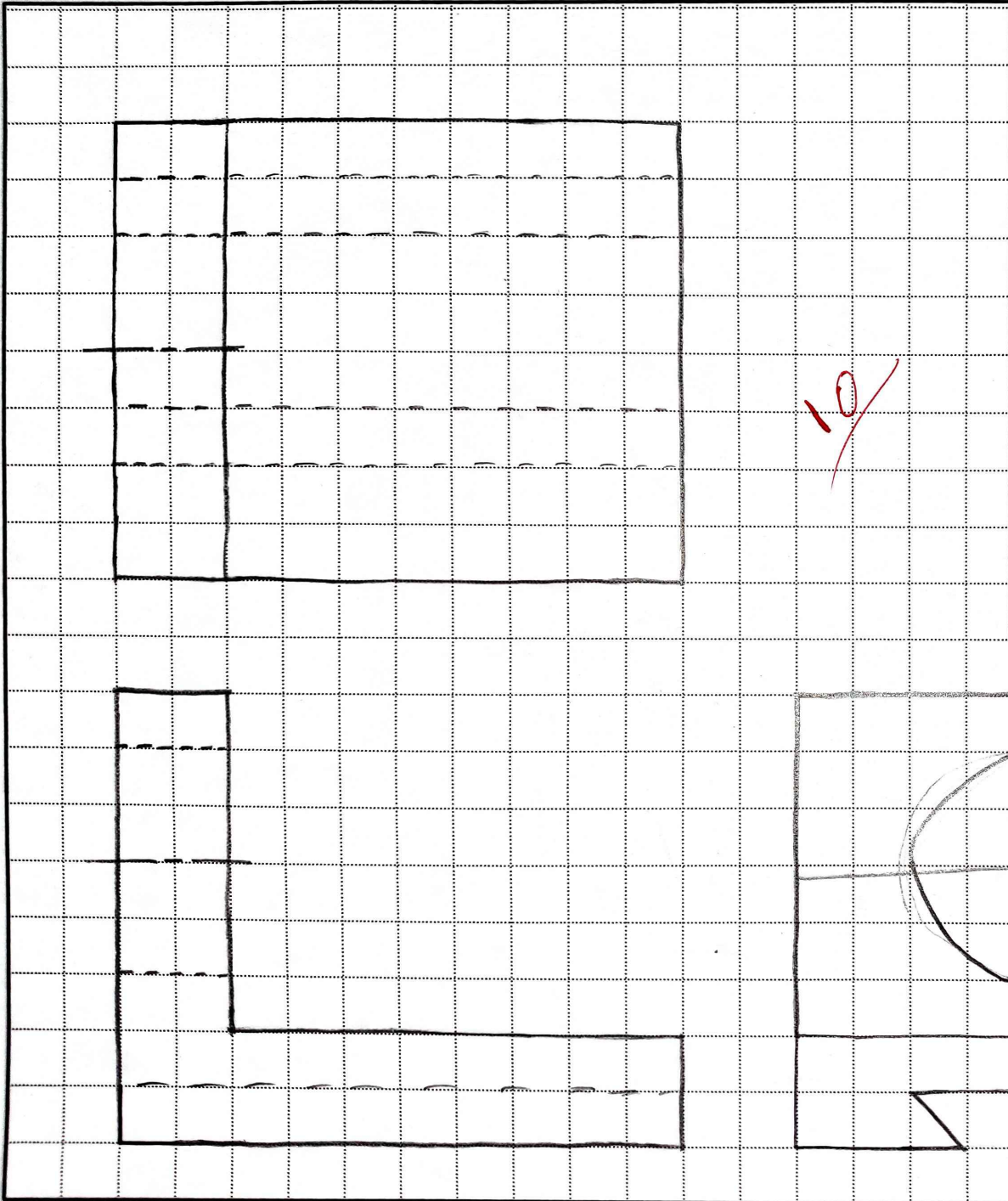
10/10



Name: Omayda Sarroj

ID: 1211128

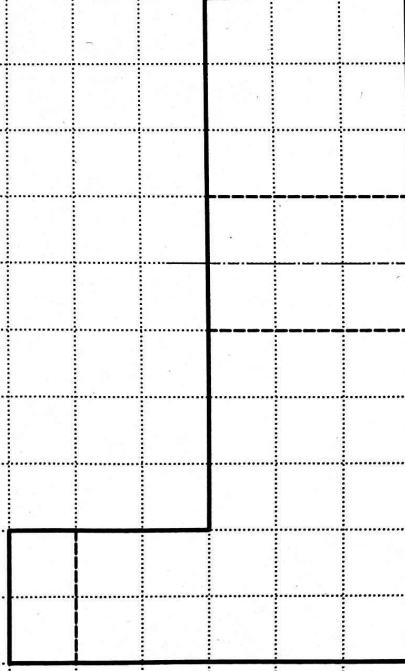
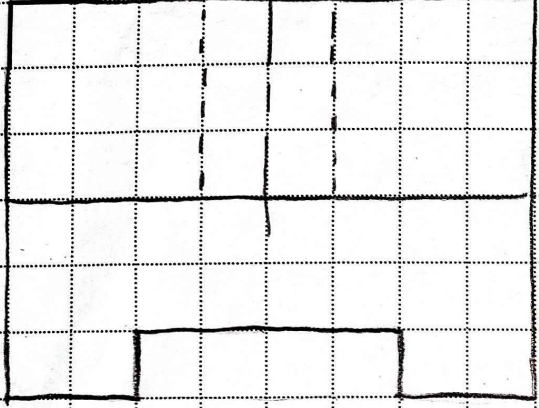
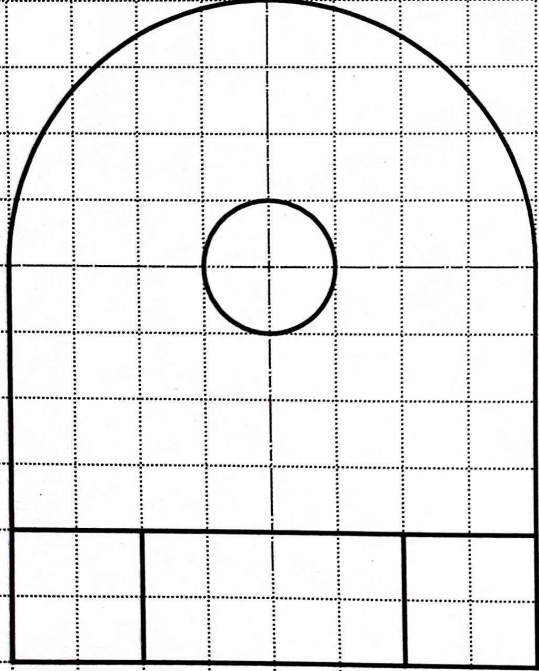
Sec: R10



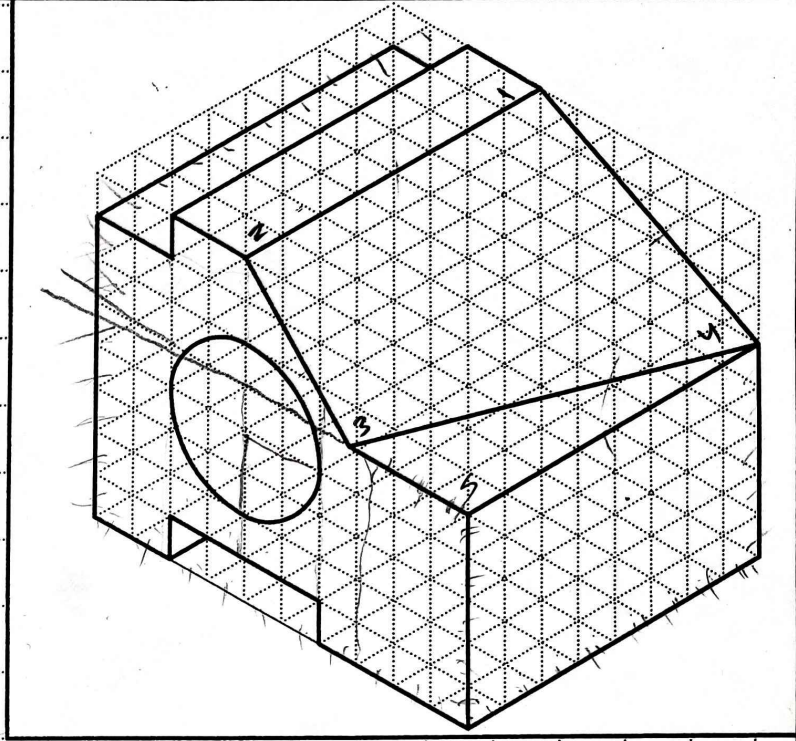
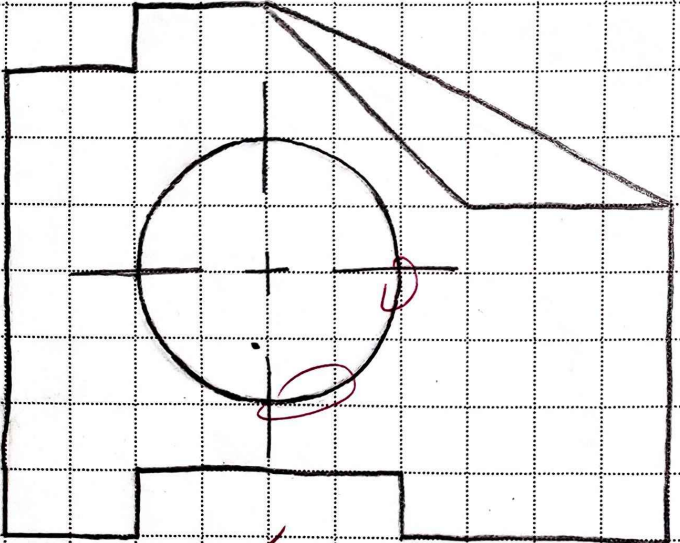
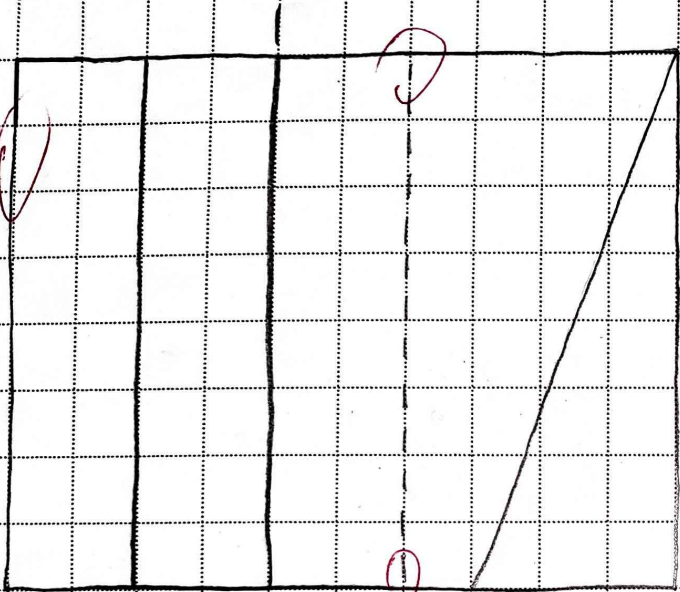
Name: Gbayda Sarrej

ID: 1211128

Sec: R10

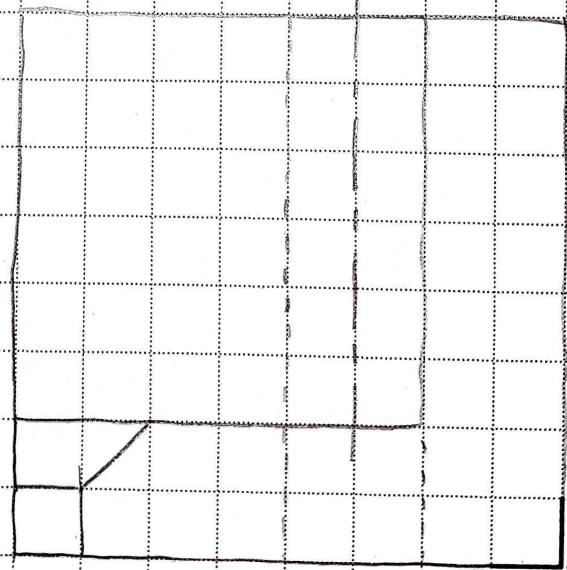
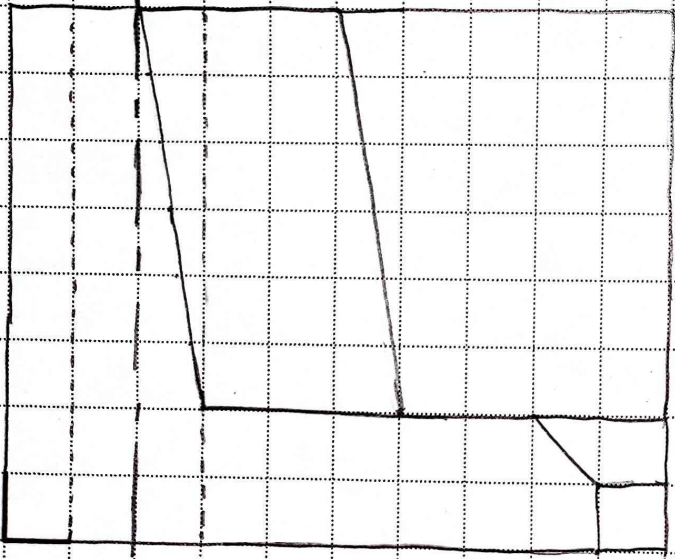
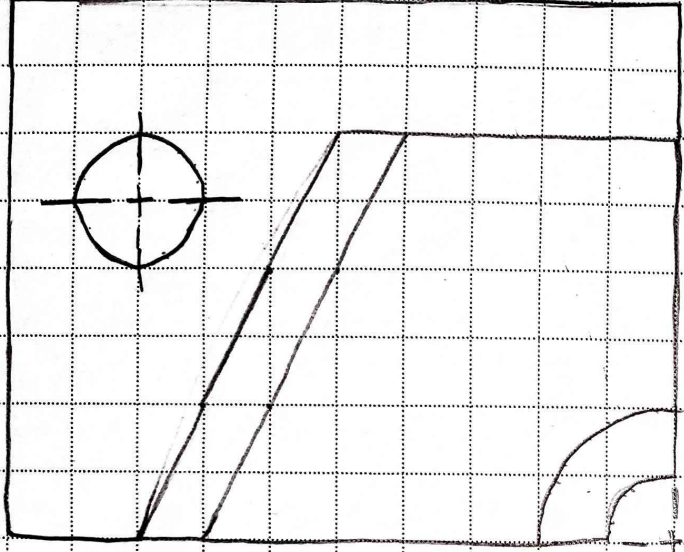


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FV 11.5
 TV 11.5
 RV 11
 left. 3

37



2.5/2.5

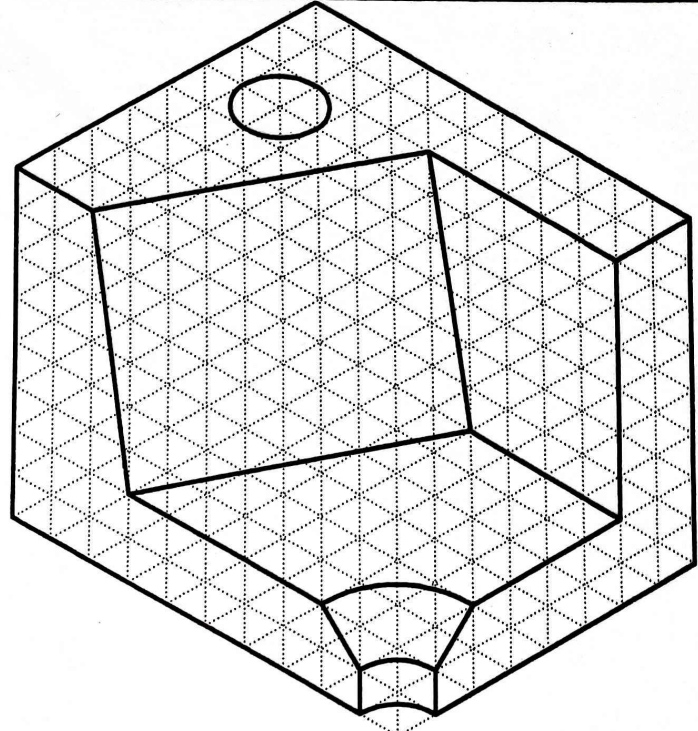


Figure (2)

