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STD

COMP

NAME

EN. No.

BATCH No.

S.V.I.T. - VASAD 388 306

DRG. NAME

ENGINEERING CURVES

DRG. No.
SVIT/MECH/11/01









SCALE
2:1

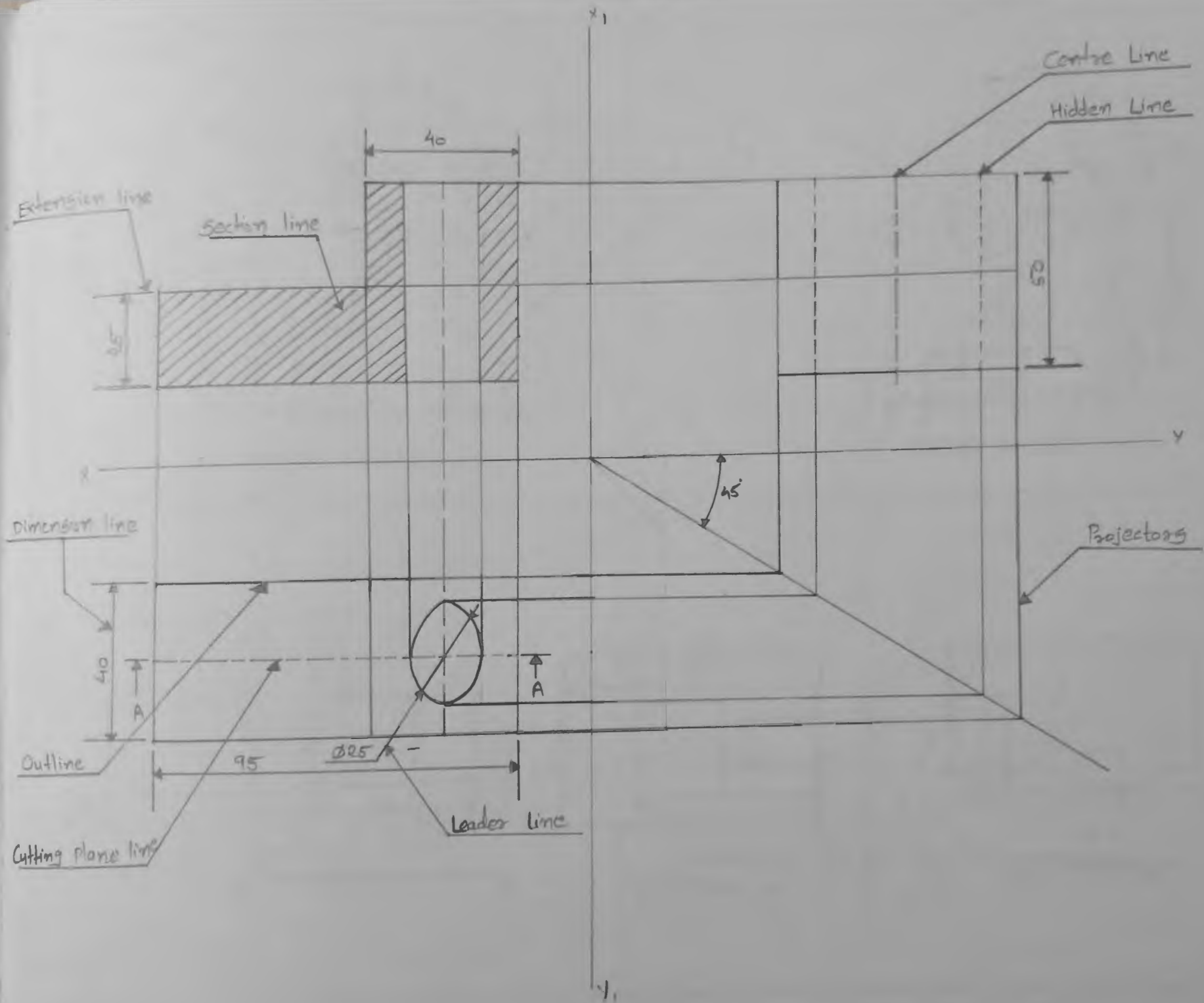
SHEET
1 of 1

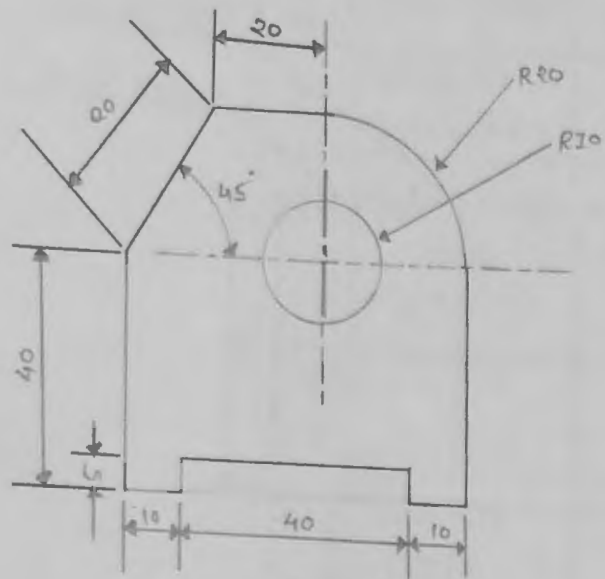
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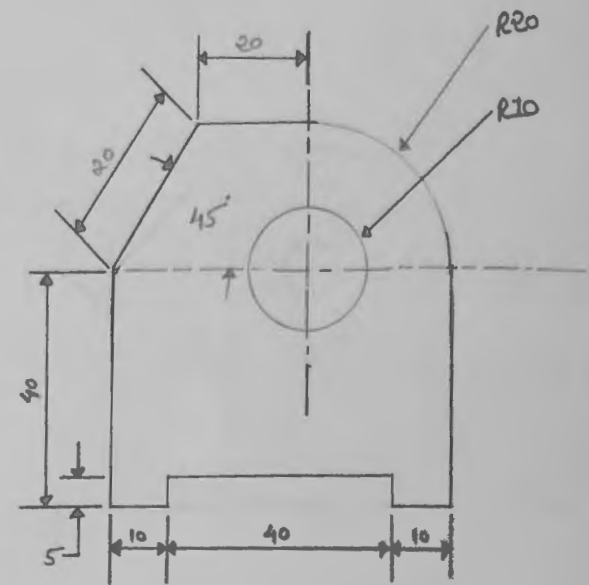
25

SR. No.	LINE TYPE	ILLUSTRATION	APPLICATION
1.	CONTINUOUS THICK (0.5mm)		VISIBLE OUTLINES
2.	CONTINUOUS THIN (0.2mm)		DIMENSION, LEADER, EXTENSION, CONSTRUCTION LINES, OUTLINES OF ADJACENT PARTS, HATCHING, REVOLVED SECTION
3.	DASHED THIN		HIDDEN LINES
4.	CHAIN THIN		CENTRE LINES, LINES OF SYMMETRY, LOCUS LINES, PITCH CIRCLES
5.	CHAIN THIN WITH THICK ENDS		CUTTING PLANES
6.	CHAIN THICK		INDICATION OF SURFACE TO WHICH A SPECIAL REQUIREMENT APPLIES
7.	CONTINUOUS THIN - FREE HAND		IRREGULAR BOUNDARY LINES, SHORT BREAK LINE
8.	CONTINUOUS THIN WITH ZIGZAGS		LONG BREAK LINES

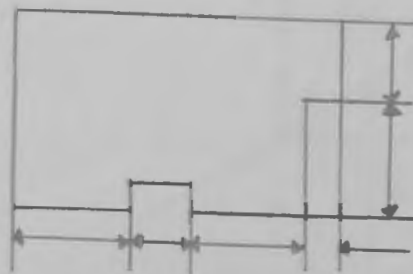




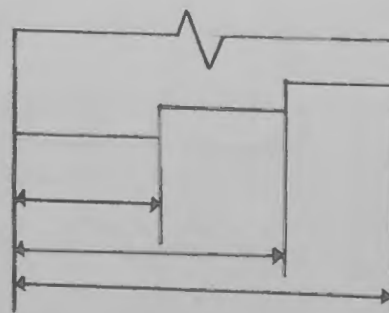
Aligned system



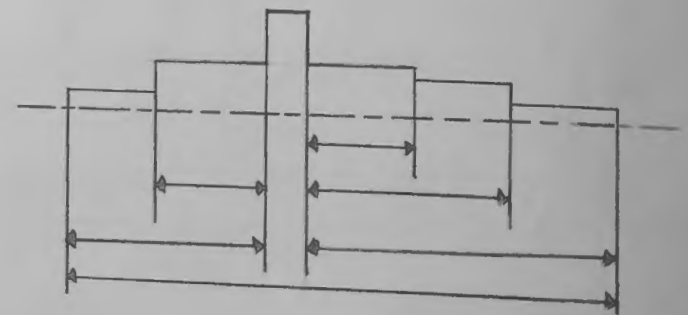
Uni-directional system



Chain dimensioning

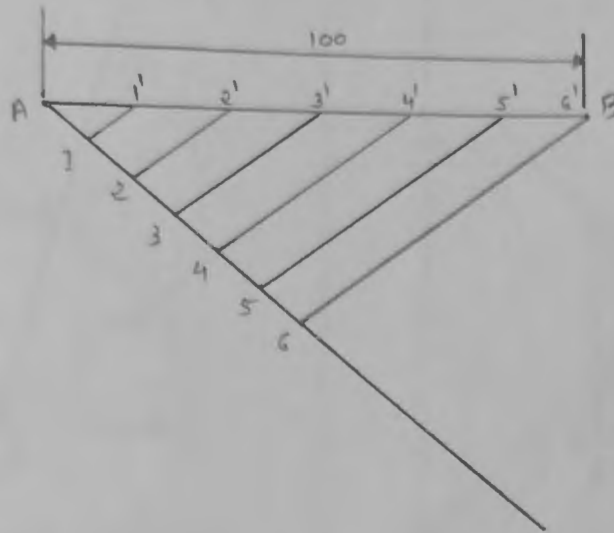


Parallel dimensioning

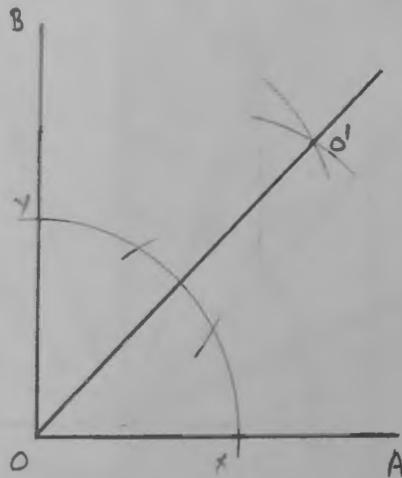


Combined dimensioning

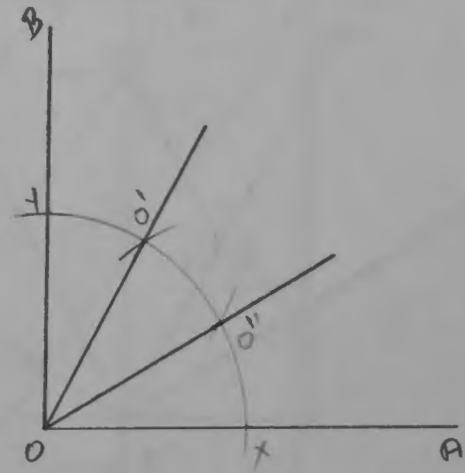
DIVISION OF LINE:-



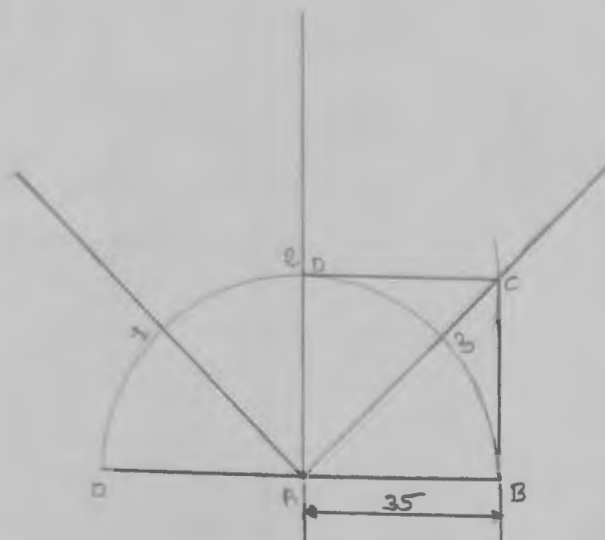
BISECT:-



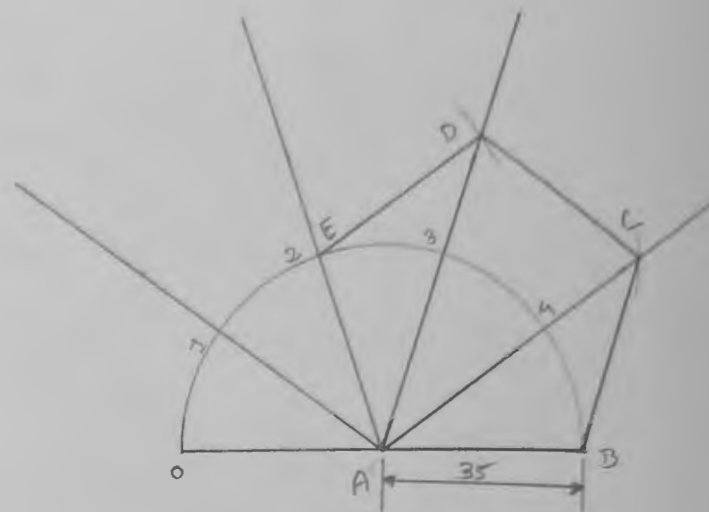
TRISECT:-



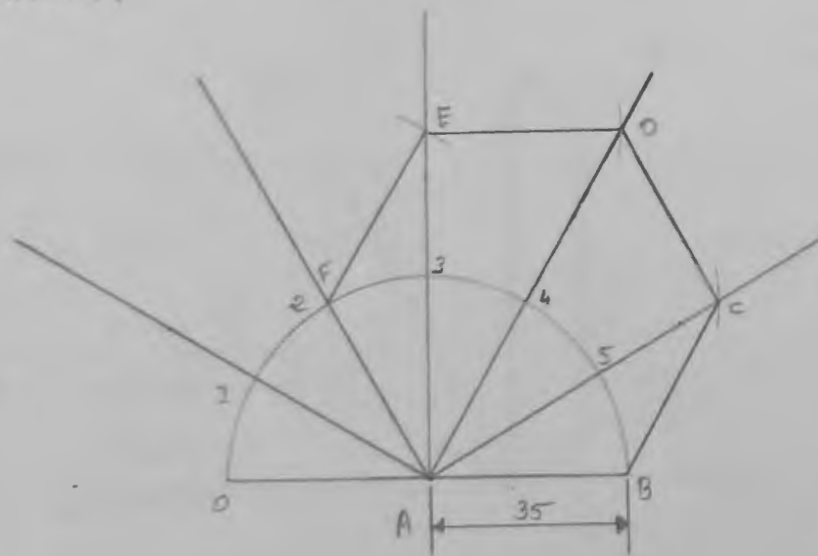
SQARE



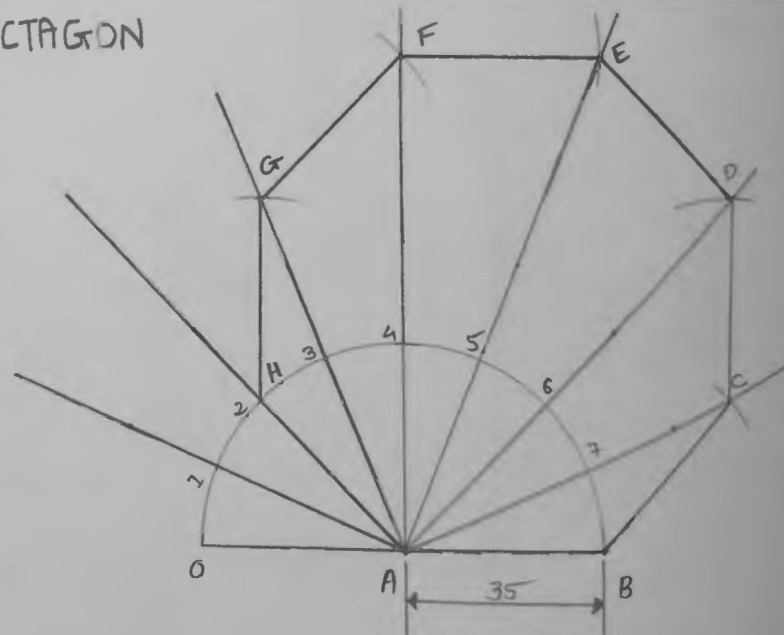
PENTAGON



HEXAGON



OCTAGON



Question:-1

$$K_{m1} \text{ and } h_{m1} = 1 K_{m2} = 1 h_{m2}$$

25 mm = 1 Km

R.F. : DS/AS

$$= 25 \text{ mm} / 7 \text{ mm}$$

$$= 25 \text{ mm} / (2100 \times 100 \times 10 \text{ mm})$$

$$= 7/10000$$

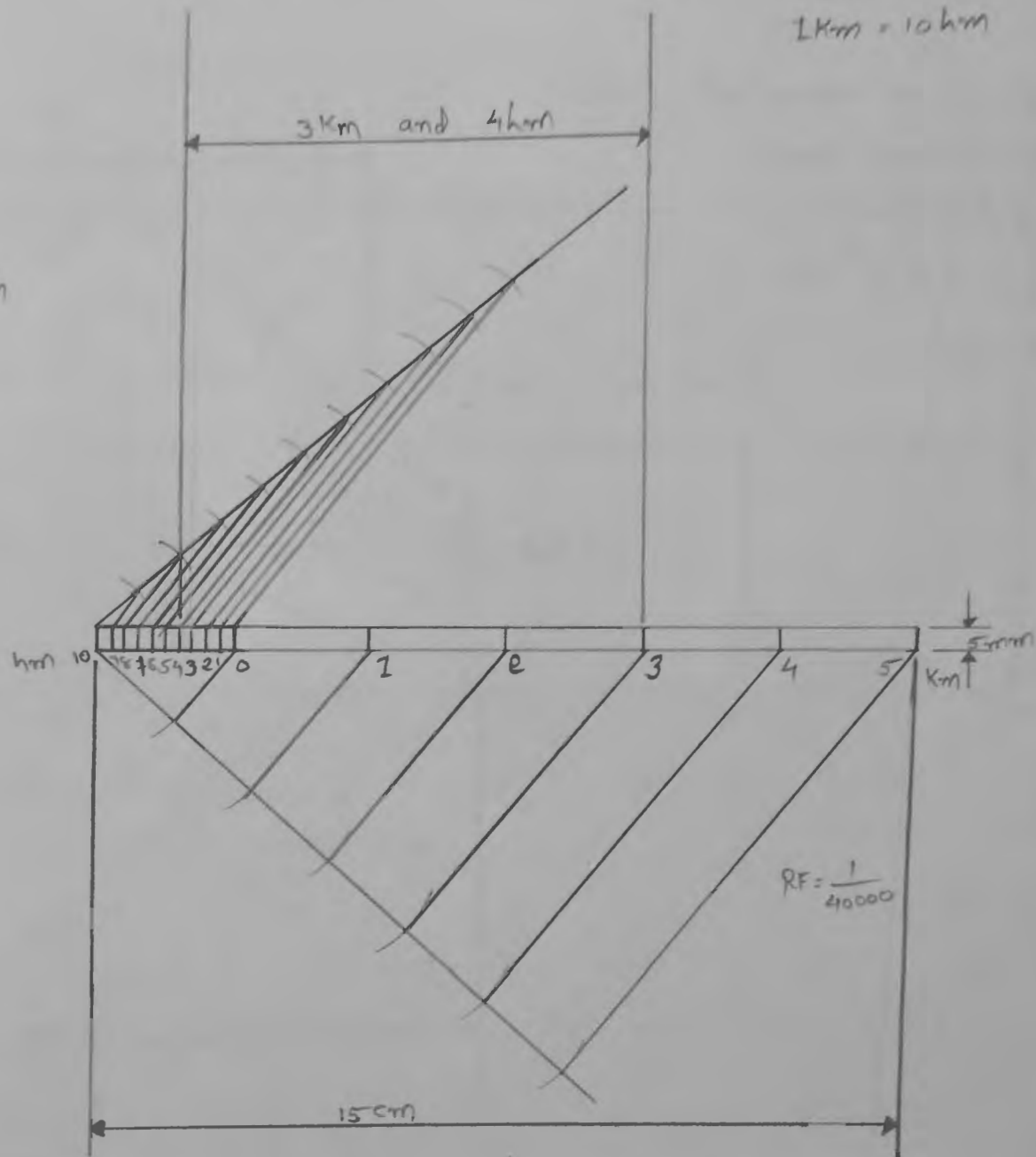
Max Length to be measured = 6 Km

$$LOS = R.F. \times \text{max length}$$

$$= \frac{I}{40000} \times 6 \text{ Km}$$

$$= \frac{1}{40000} \times 6 \times 1000 \times 100 \text{ cm}$$

$= 15 \text{ cm}.$



Question: 2

Feet and inch - 1 Foot 12 inch

R.F. = 1/10 = 1/10

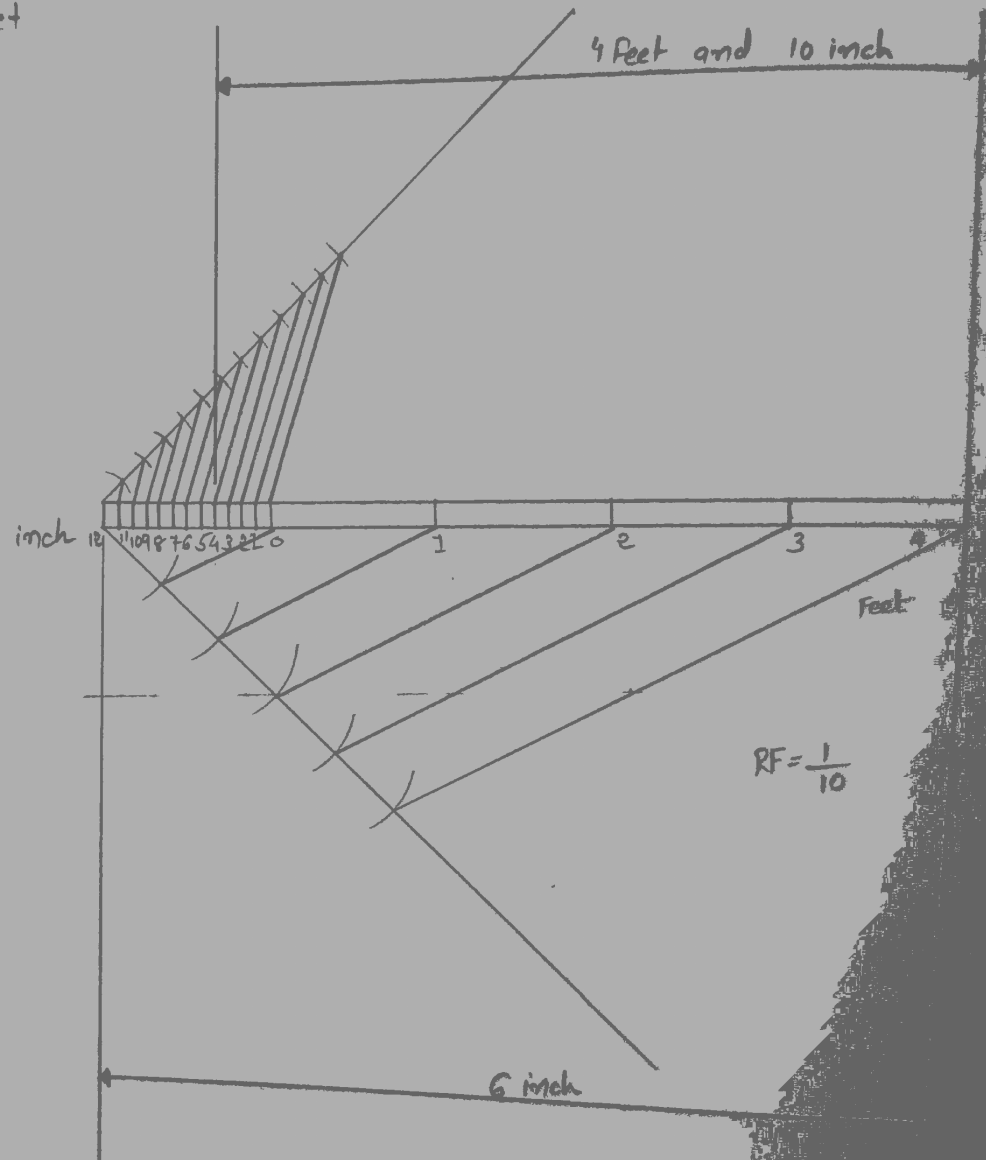
Max length to be measured - 5 feet

LOS: R.F. \times Max length

$$= \frac{1}{10} \times 5 \text{ Feet}$$

$$= \frac{1}{10} \times 5 \times 12 \text{ inch}$$

$$= 6 \text{ inch}$$

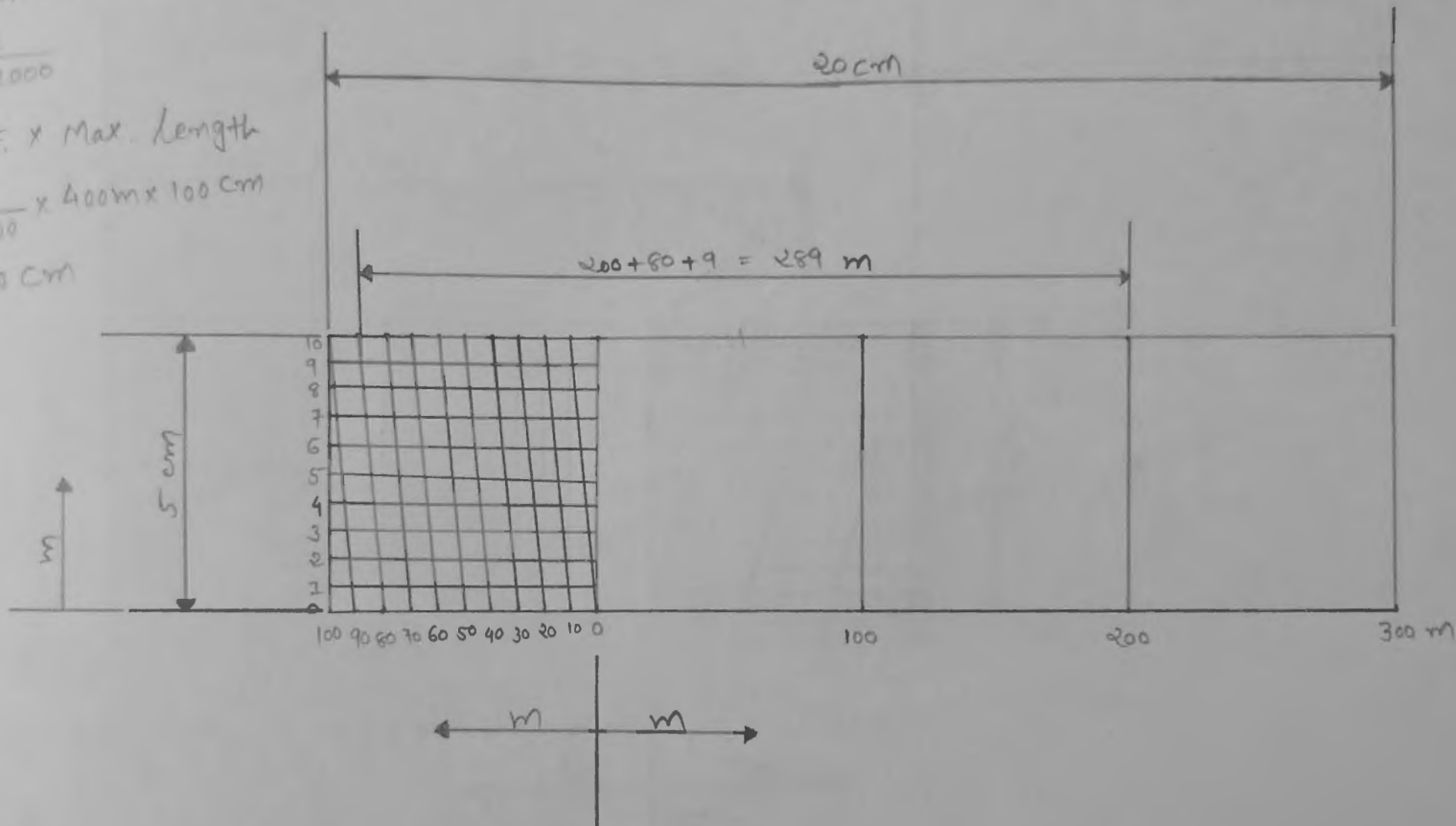


Question :- 3

$$R.F. = \frac{\text{length in drawing}}{\text{Actual length}}$$

$$LOS = R.F. \times \text{Max. Length}$$

$$= \frac{1}{2000} \times 400 \text{ m} \times 100 \text{ cm}$$

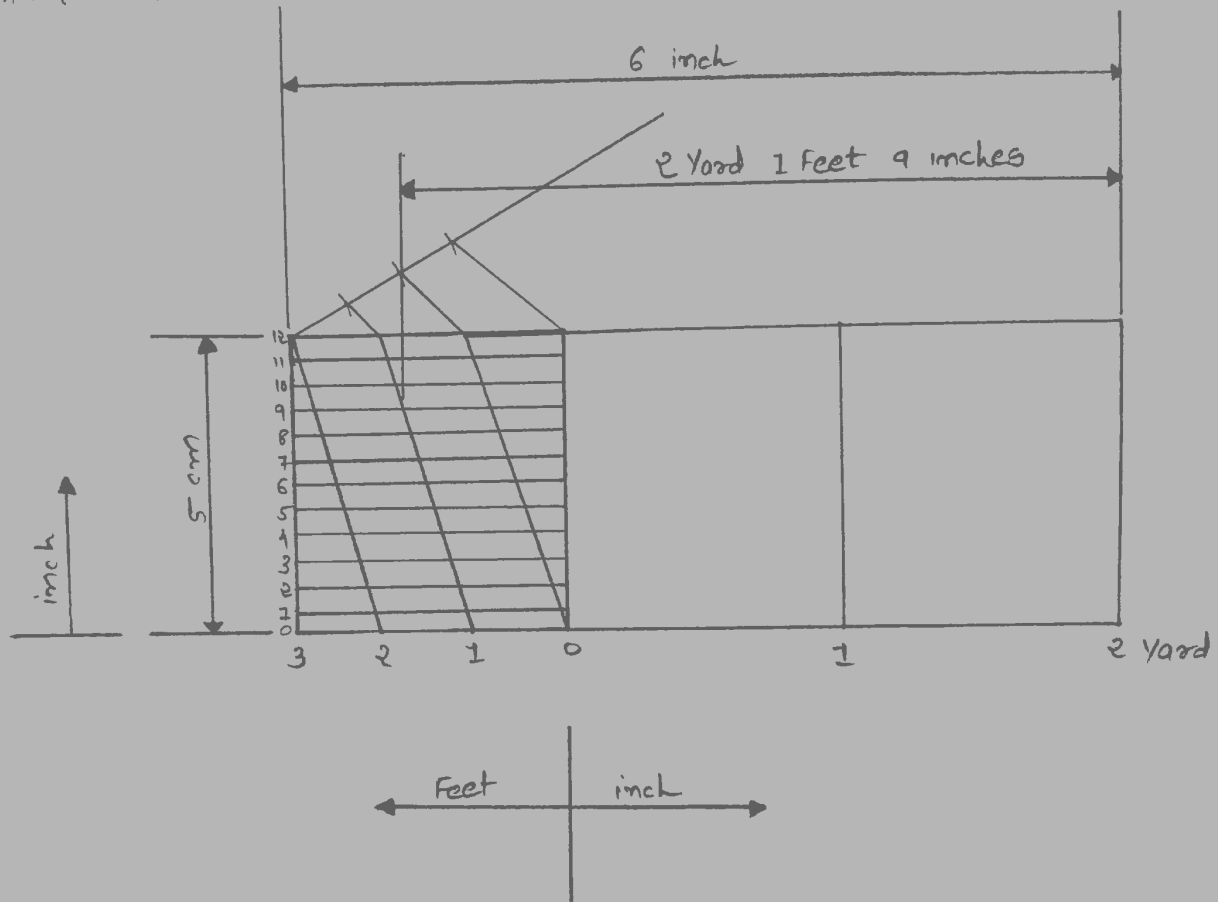


Question - 4

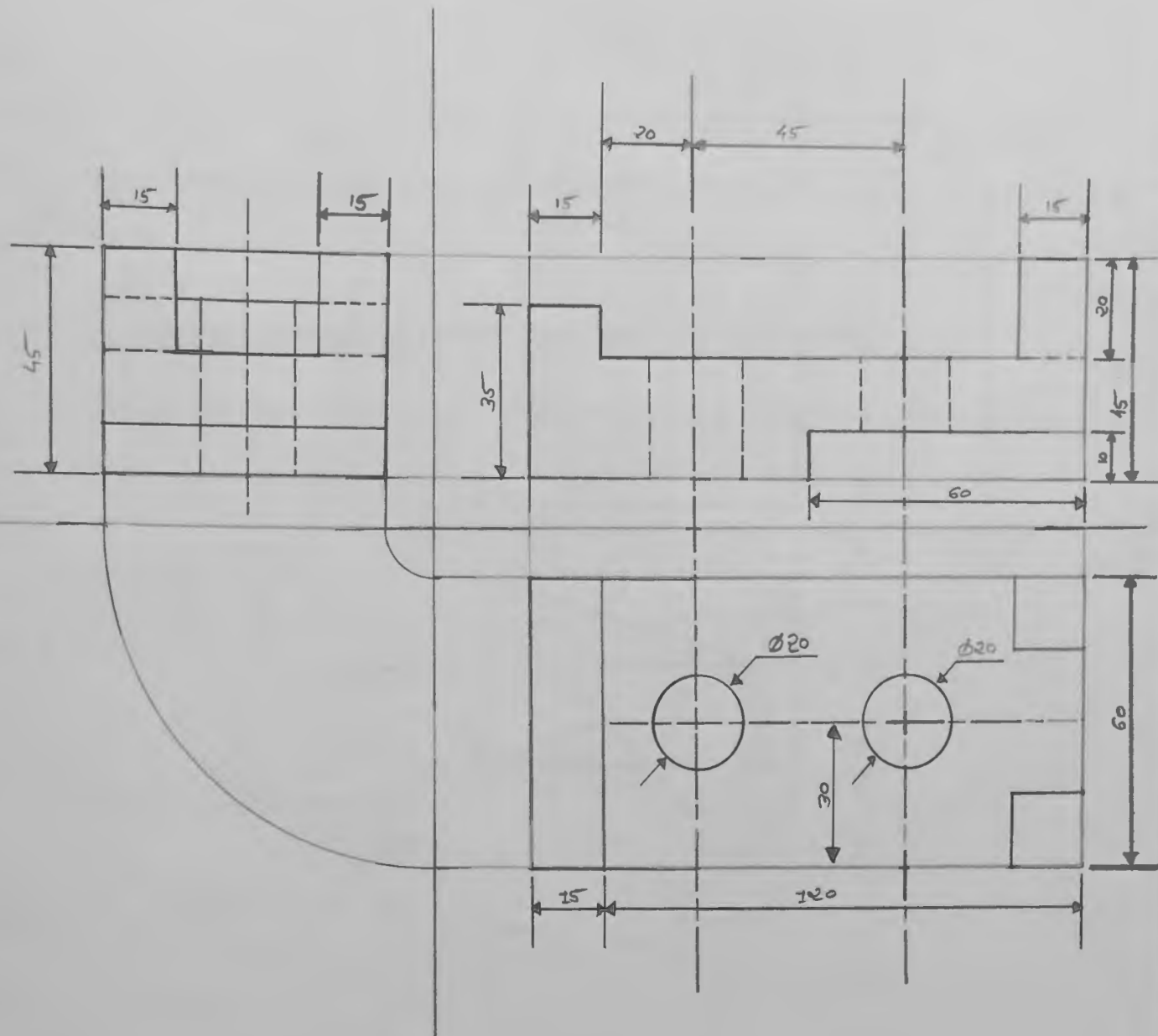
$$x = \frac{1}{12}$$

long = ... var length

... a foot x 18 inches

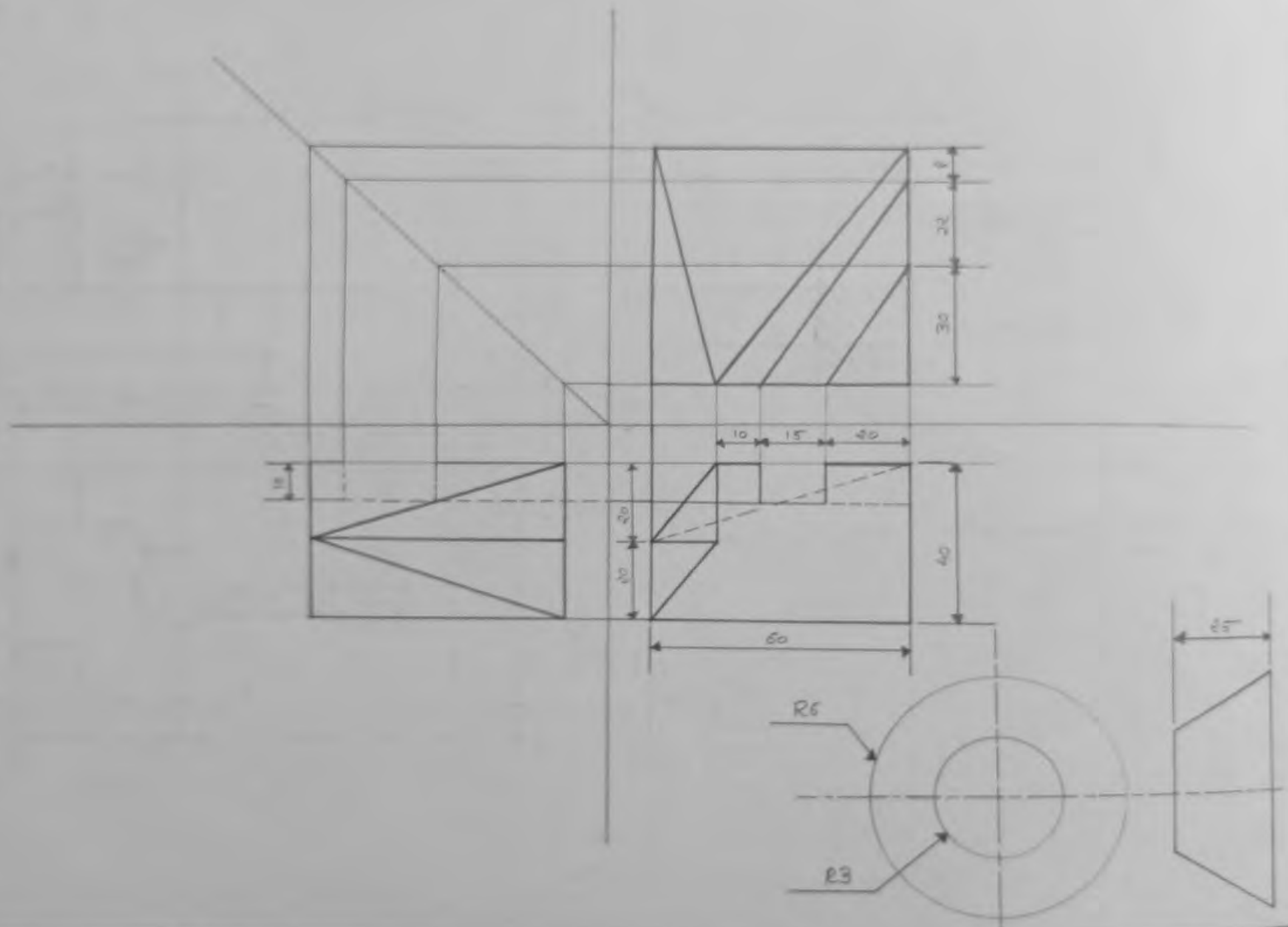


Problem :- B1

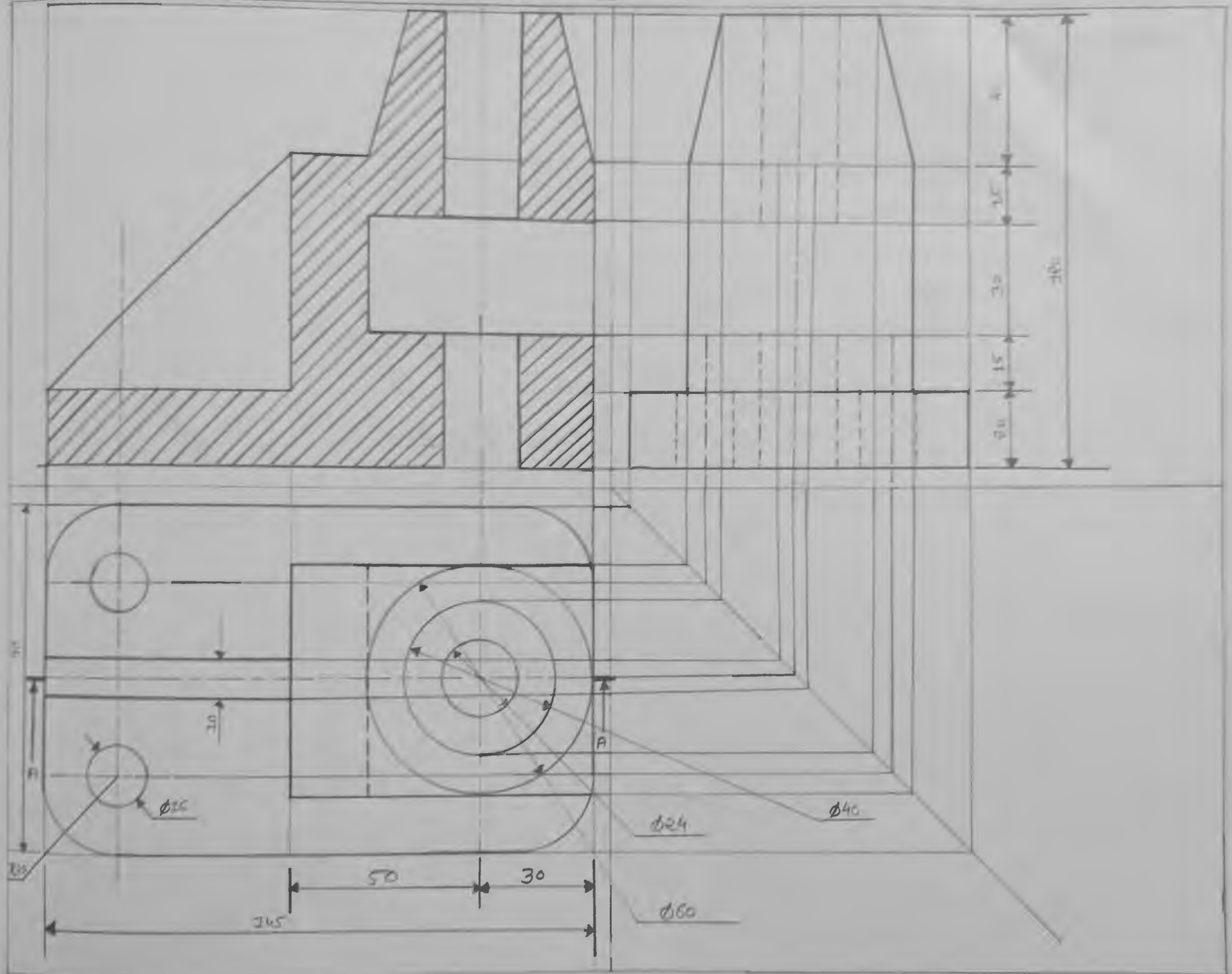


ORTHOGRAPHIC PROJECTION

Problem - B2

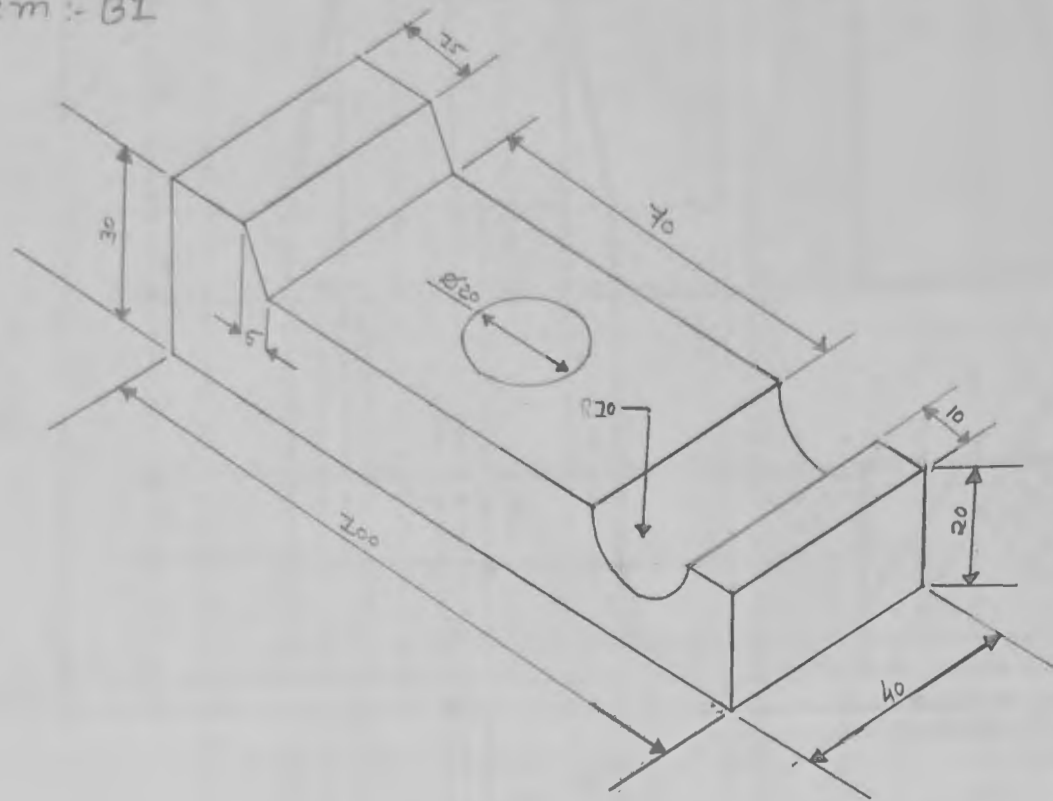


ORTHOGRAPHIC PROJECTION Problem - B3



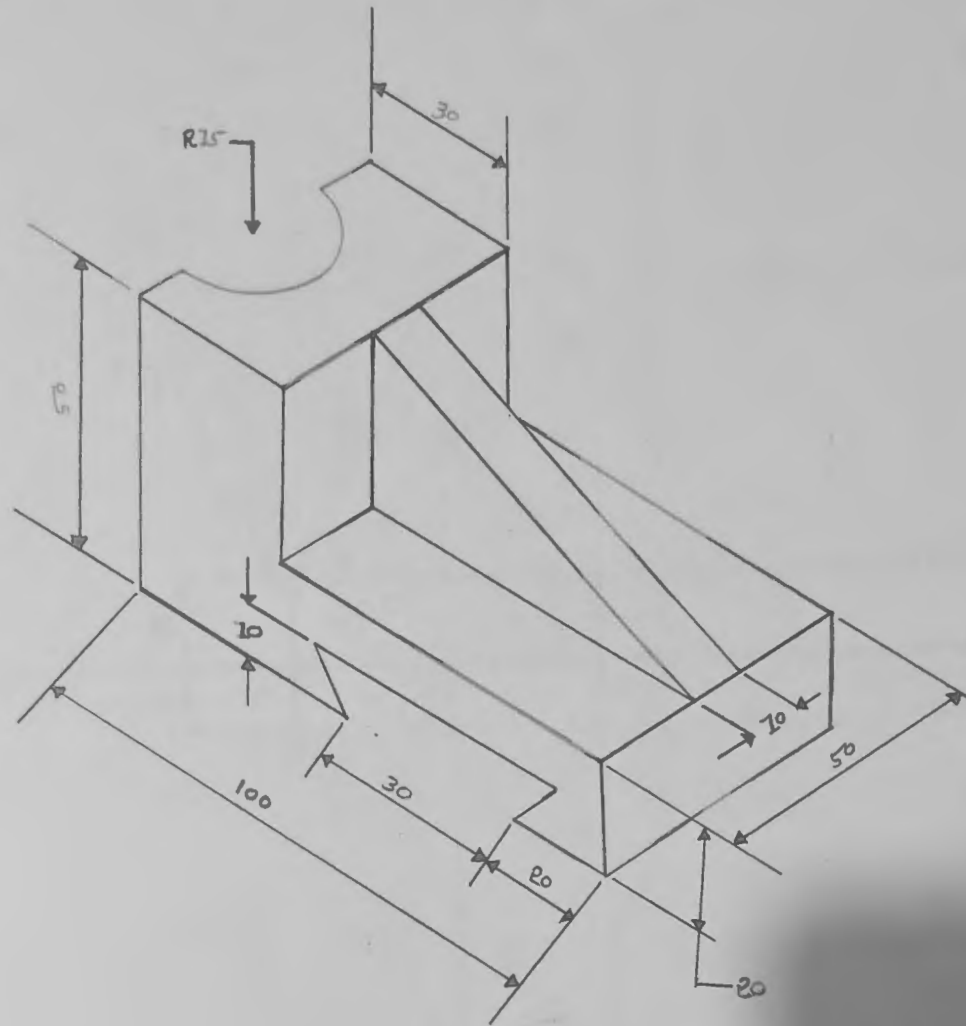
ISOMETRIC PROJECTION / VIEW / DRAWING

Problem :- B1



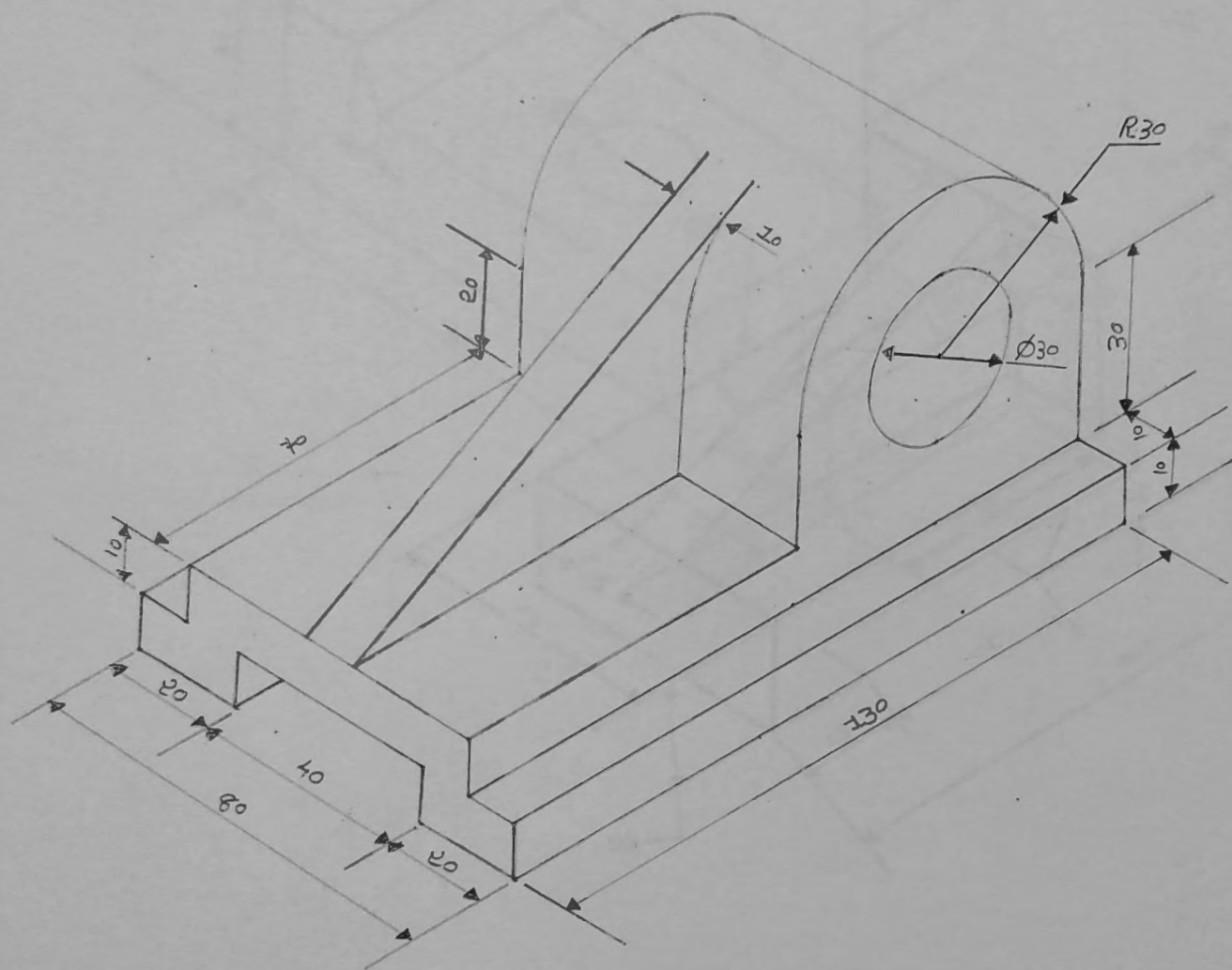
ISOMETRIC PROJECTION / VIEW / DRAWING

Problem :- B2



ISOMETRIC PROJECTION / VIEW / DRAWING

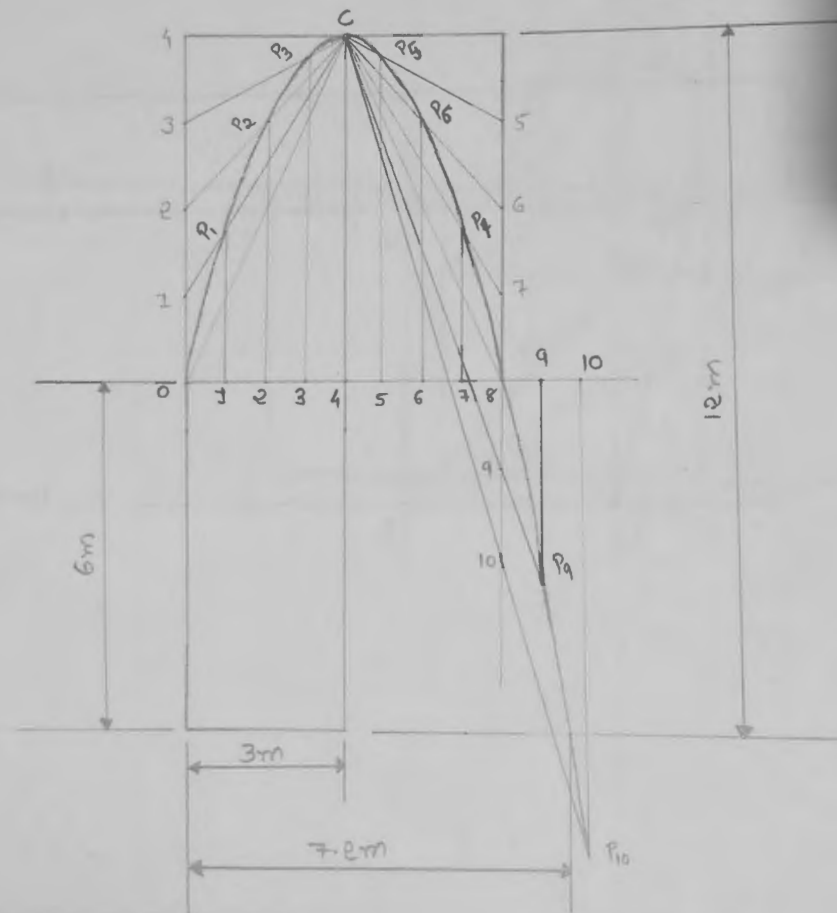
Problem :- B3



ENGINEERING CURVES

Problem :-B1

Scale 1m = 1cm

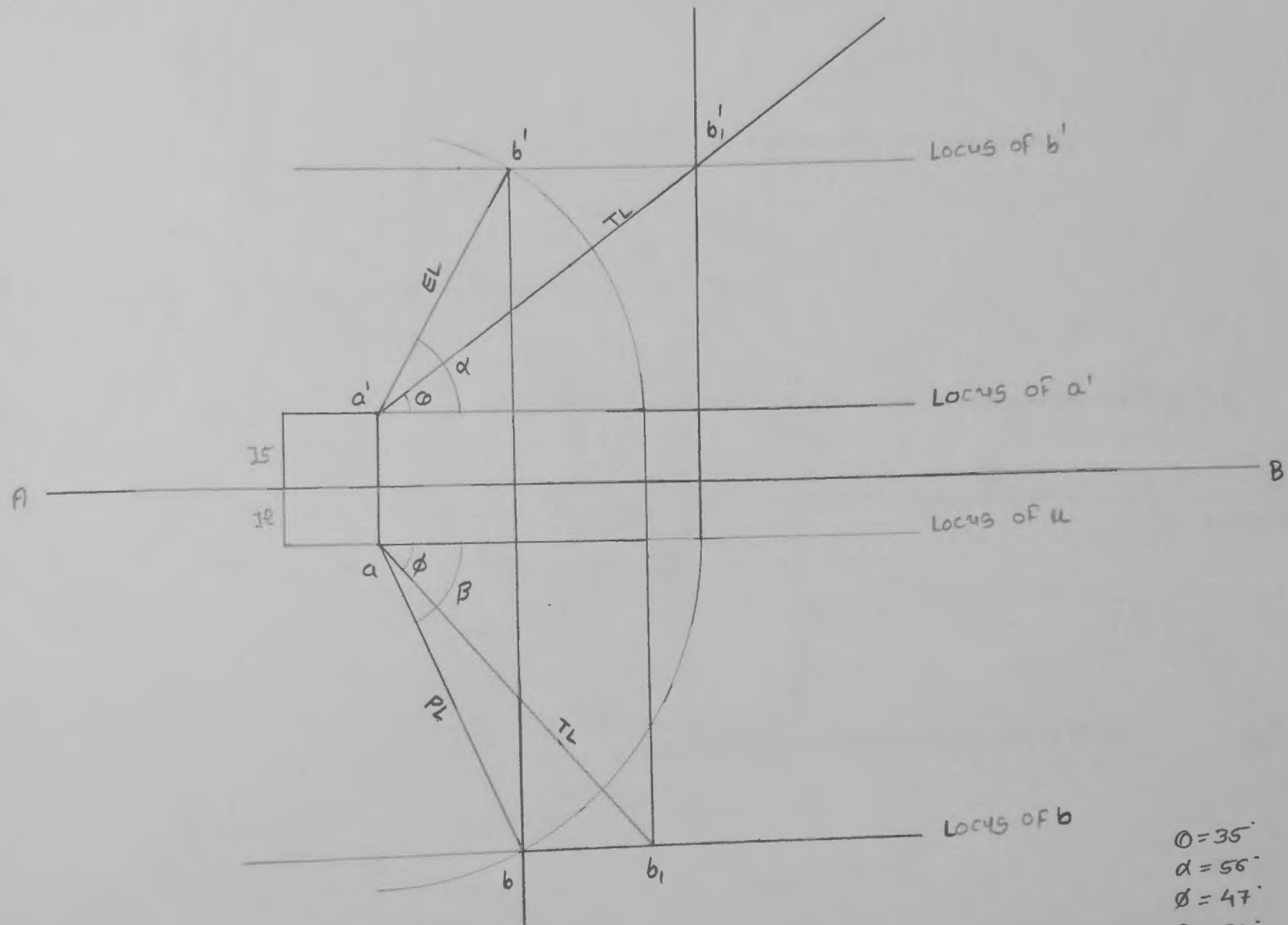


ENGINEERING CURVES

d = 50 mm

PROJECTION OF STRAIGHT LINES

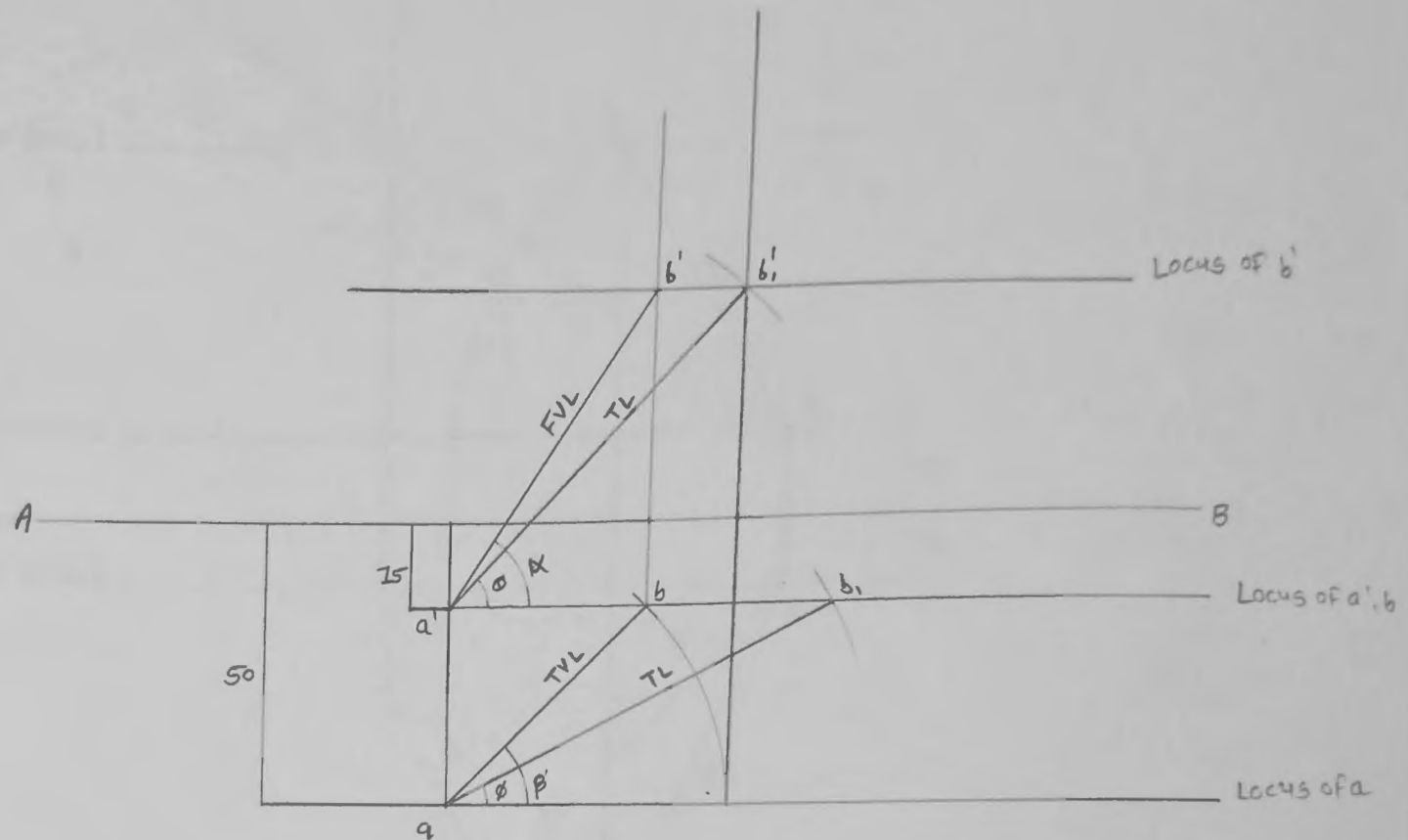
Problem :- B1



$\theta = 35^\circ$
 $\alpha = 56^\circ$
 $\phi = 47^\circ$
 $\beta = 63^\circ$
 $TL = 85 \text{ mm}$

PROJECTIONS OF STRAIGHT LINES

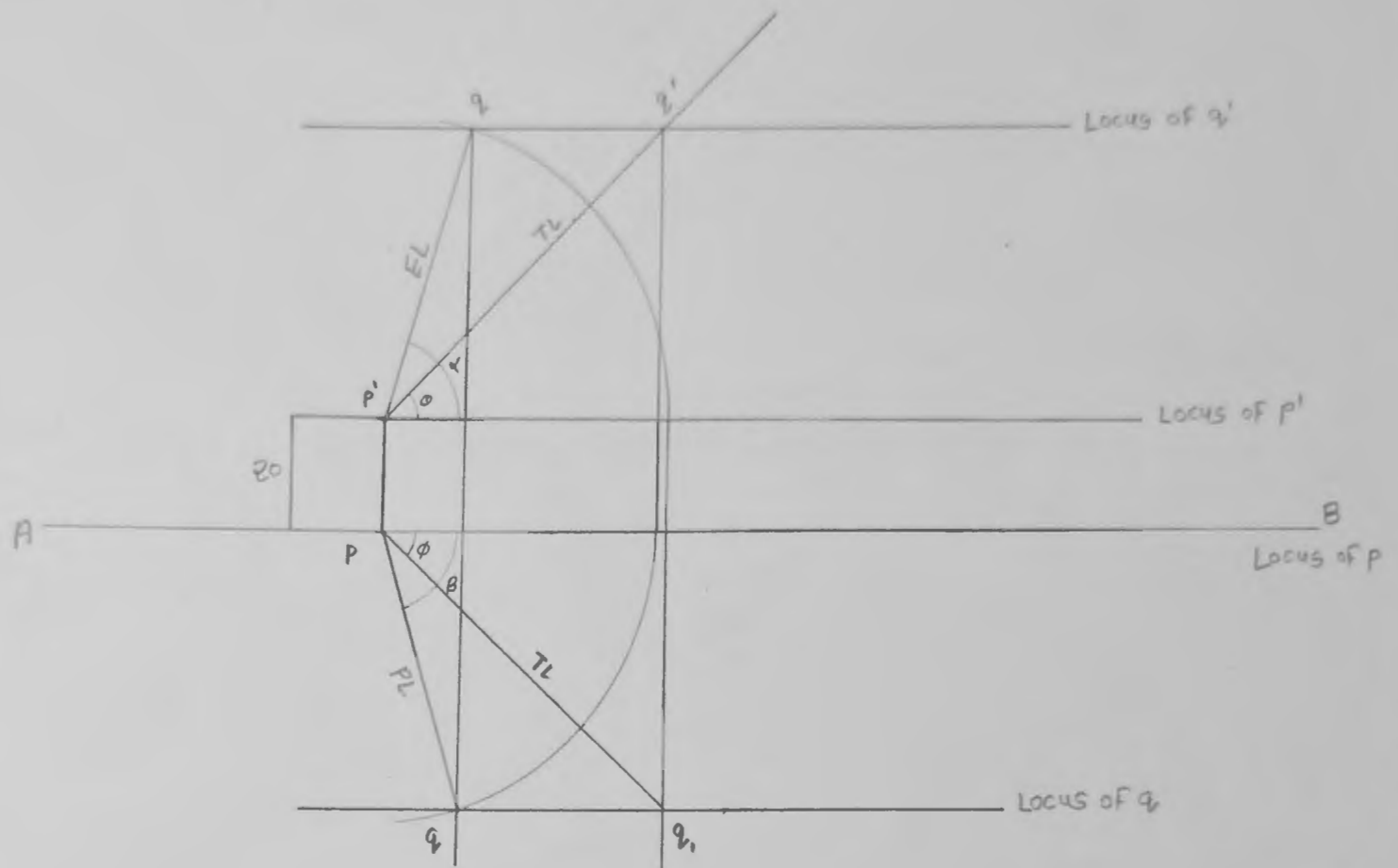
Problem:- B2



$\phi = 28^\circ$
 $\beta = 44^\circ$
 $\alpha = 57^\circ$
 $\phi = 48^\circ$
 $TL = 75 \text{ mm}$

PROJECTIONS OF STRAIGHT LINES

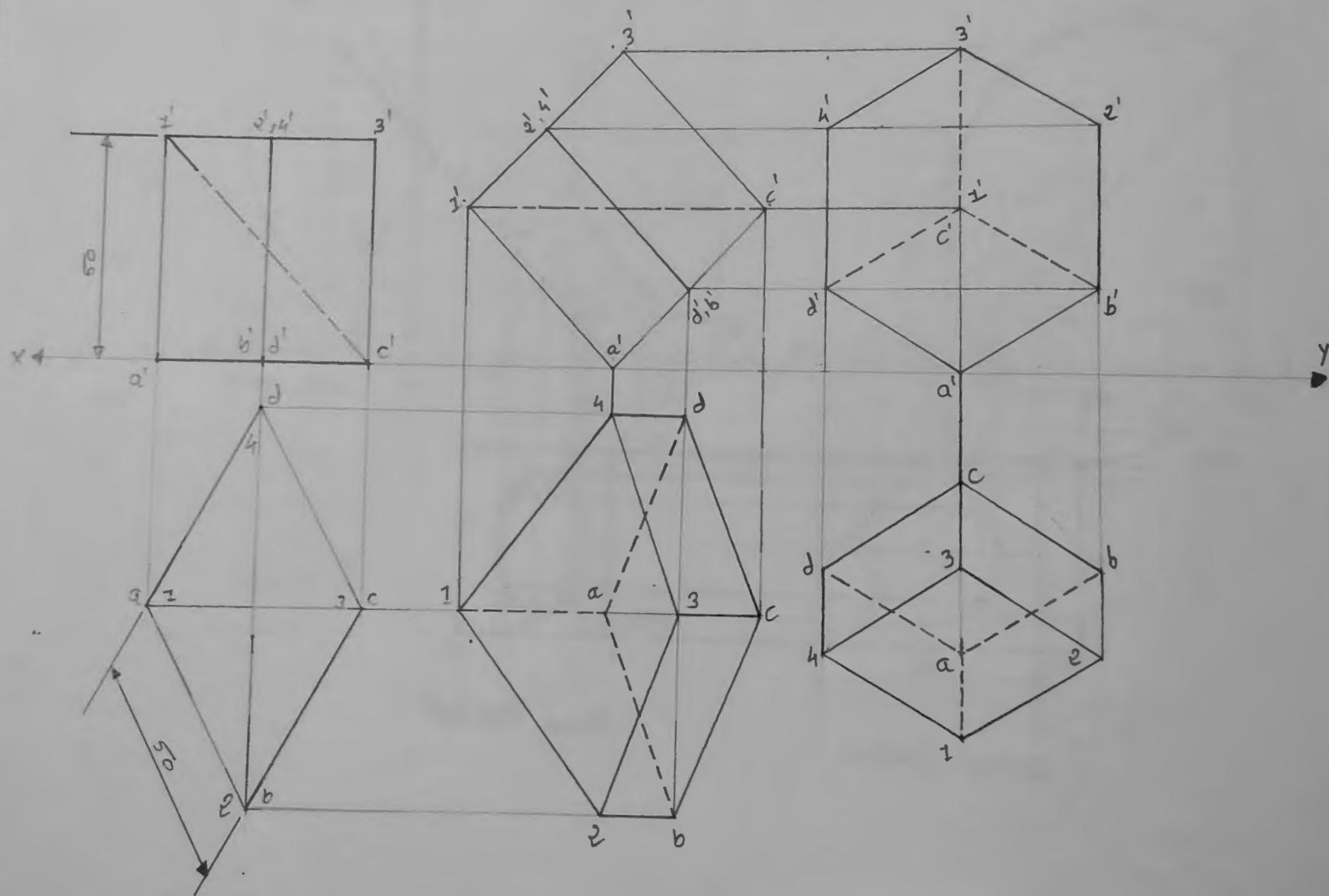
Problem :- B3



$\theta = 45^\circ$
 $d = 72$
 $\phi = 42^\circ$
 $\beta = 70^\circ$
 $TL = 75\text{ mm}$

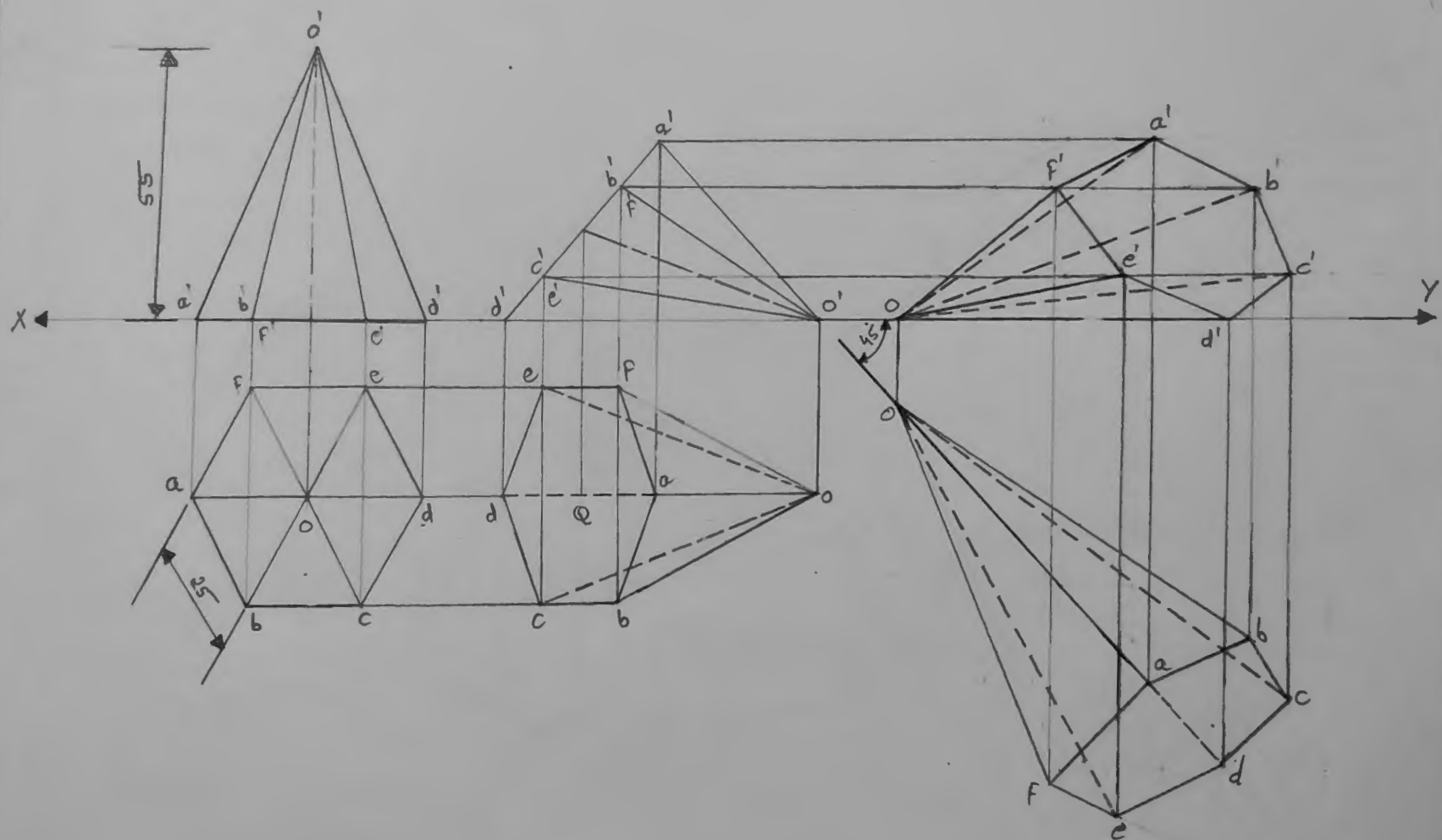
PROJECTION OF SOLIDS

Problem : B1



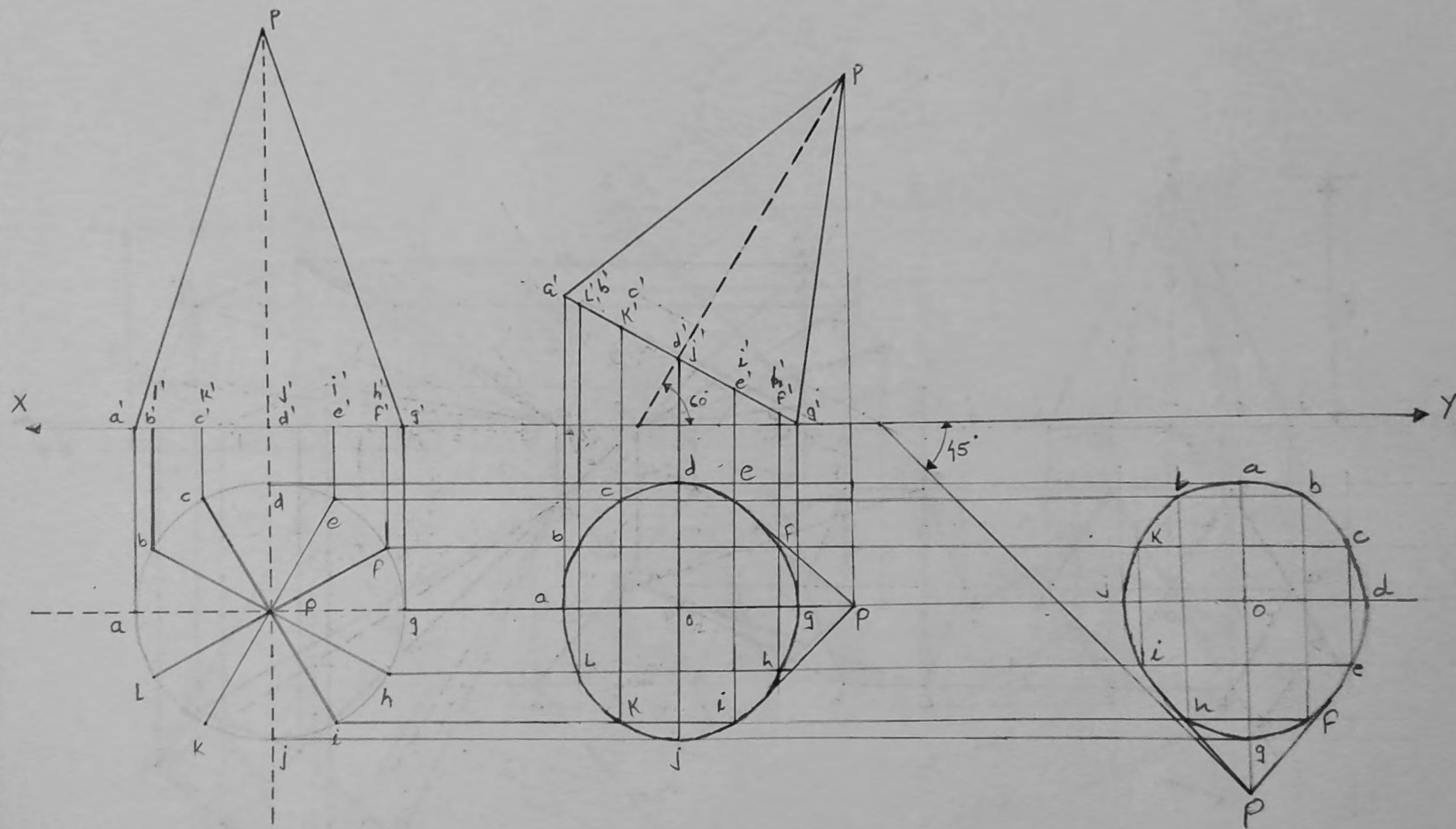
PROJECTION OF SOLIDS

Problem :- B2

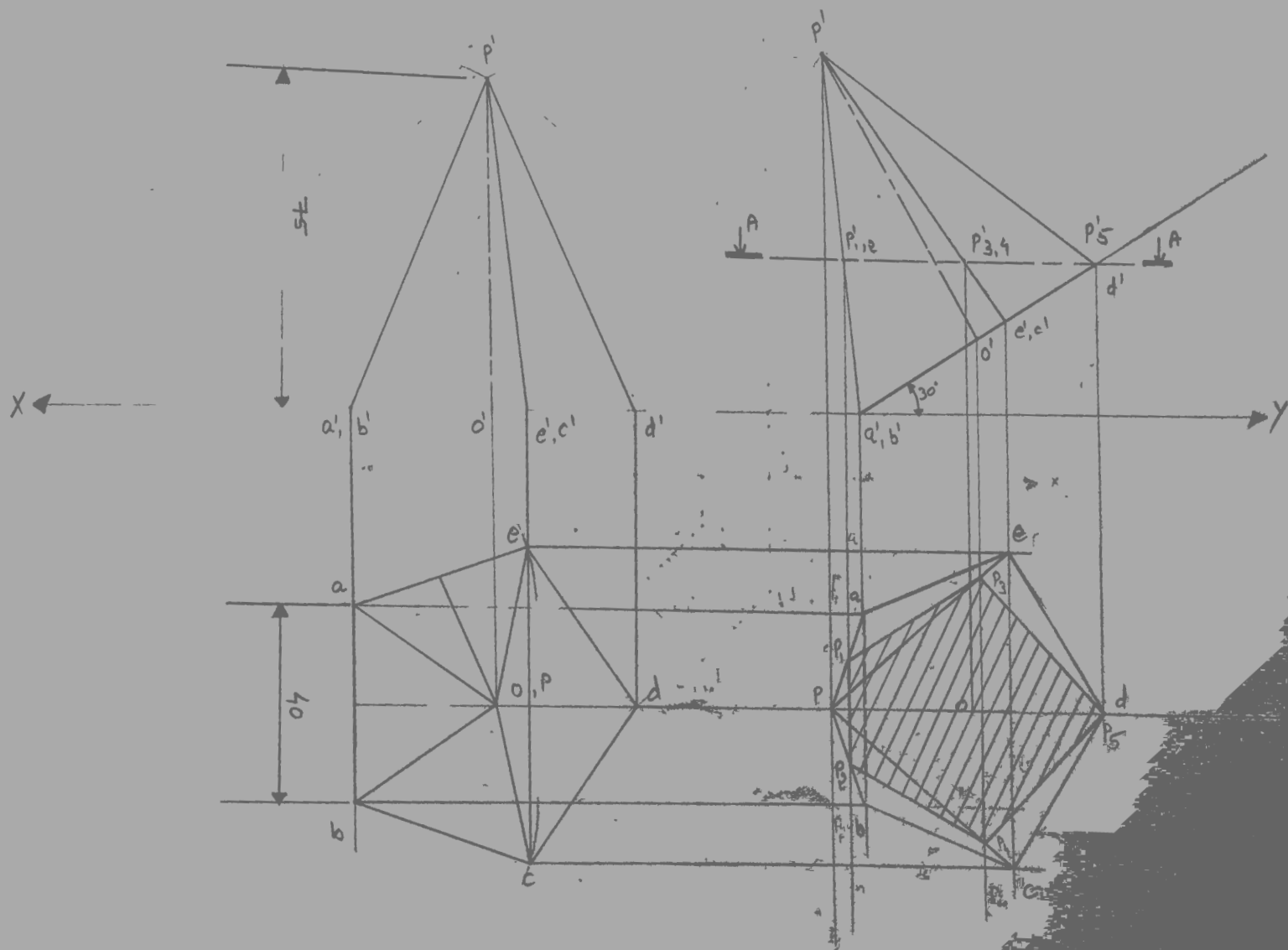


PROJECTION OF SOLIDS

Problem :- B3

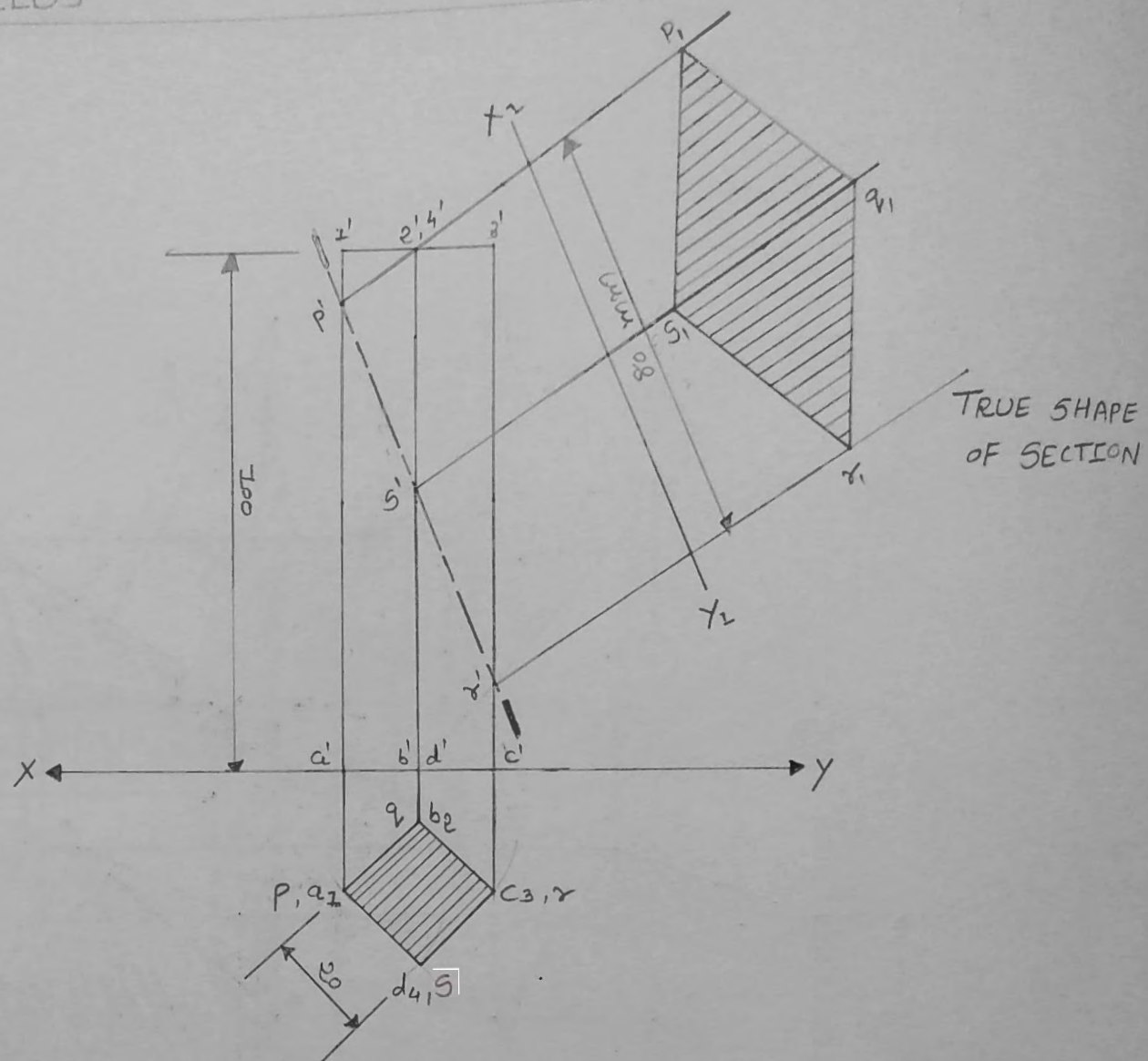


Problem :- B1



SECTIONS OF SOLIDS

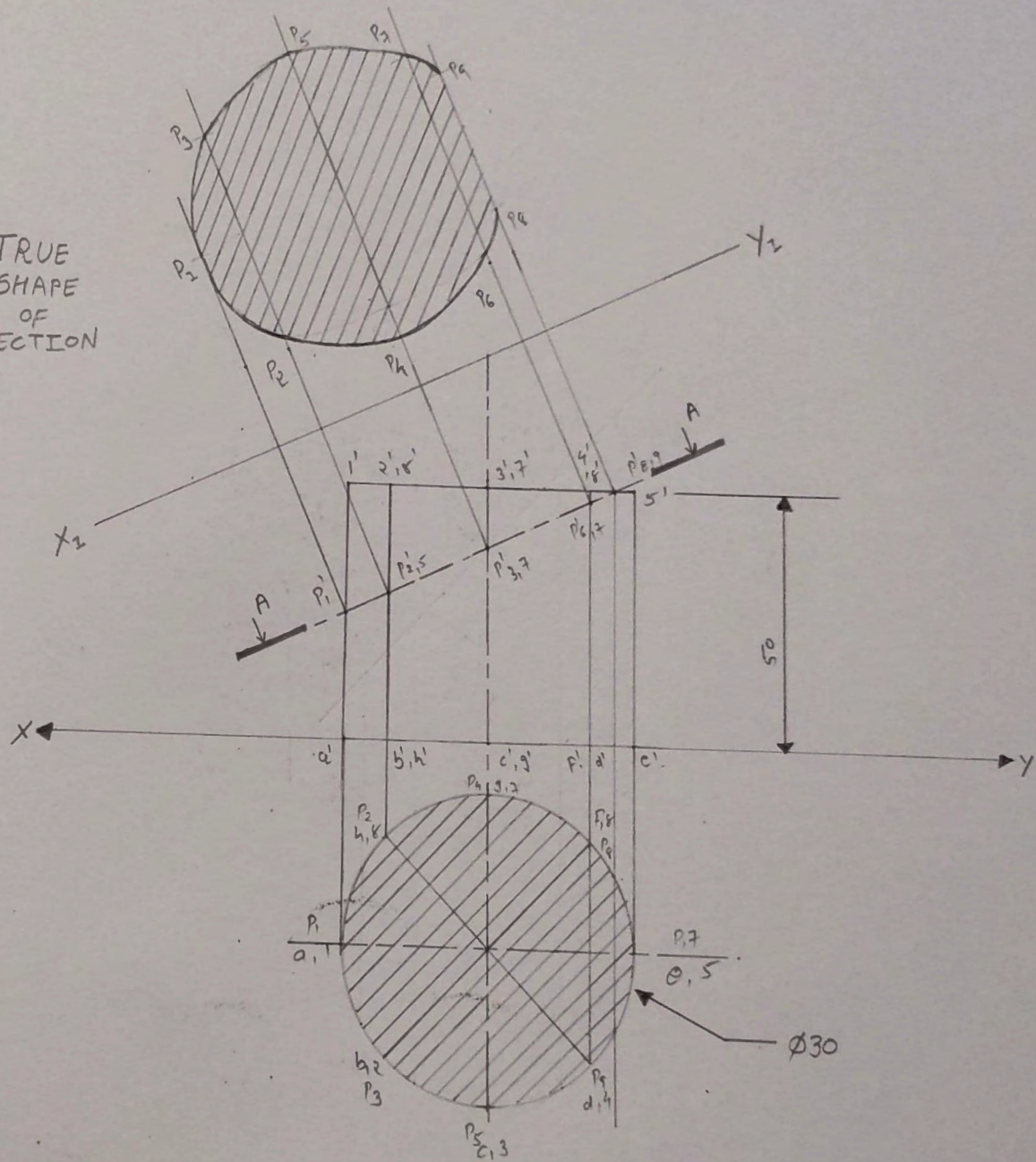
Problem :- B2



SECTIONS OF SOLIDS

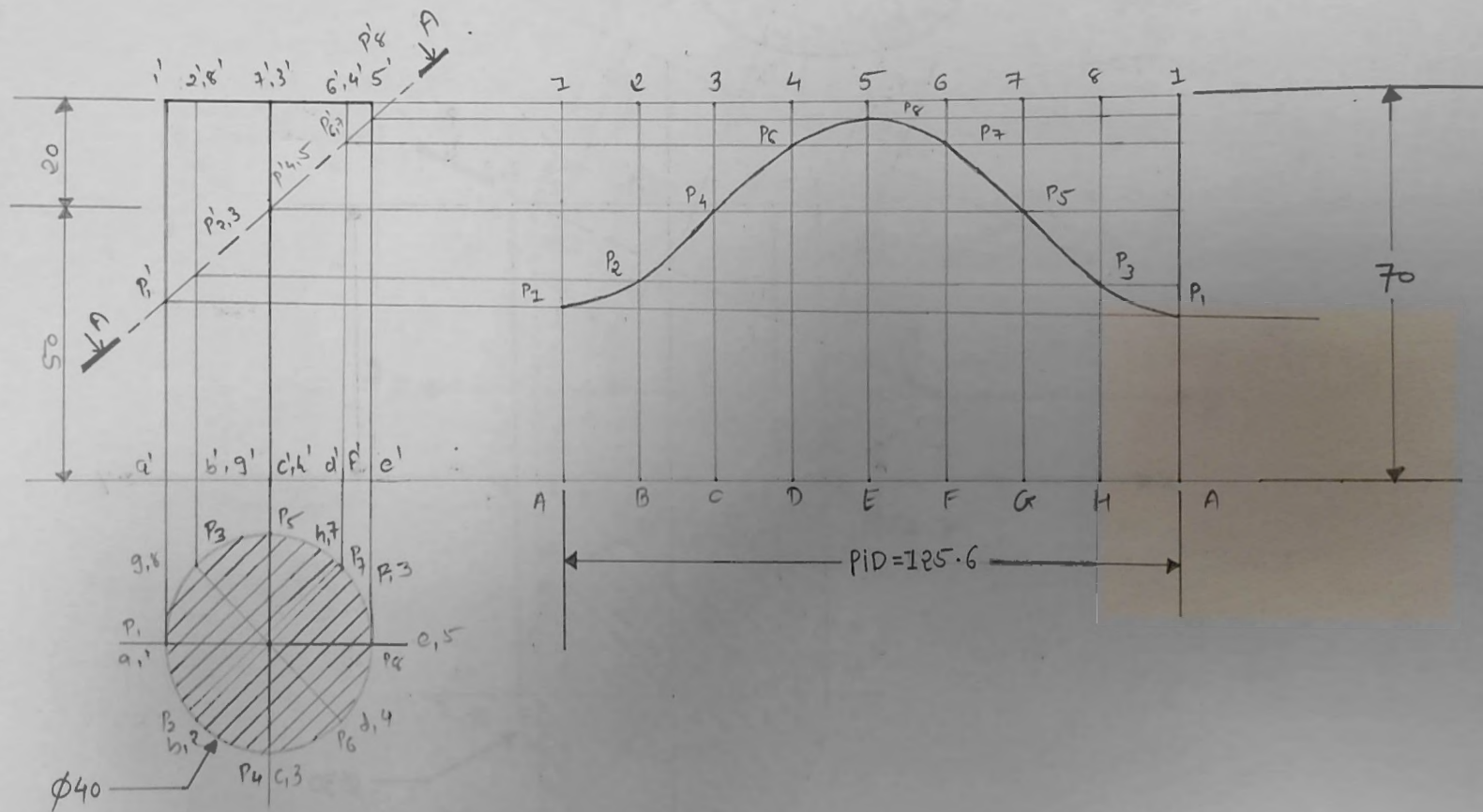
Problem :- B3

TRUE
SHAPE
OF
SECTION



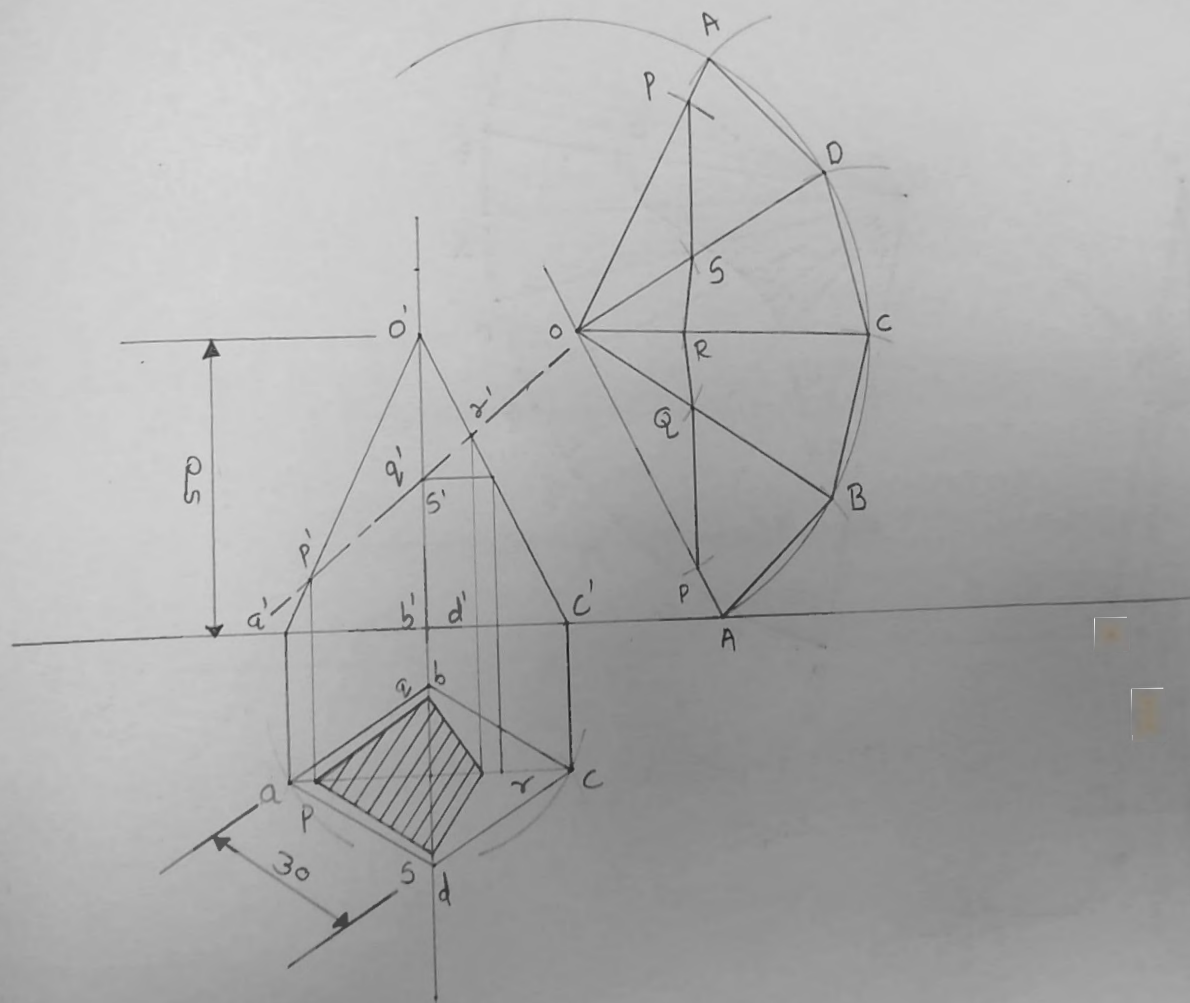
DEVELOPMENT OF SURFACE

Problem :- B1



DEVELOPMENT OF SURFACE

Problem :- B2



DEVELOPMENT OF SURFACE

Problem :- B3

