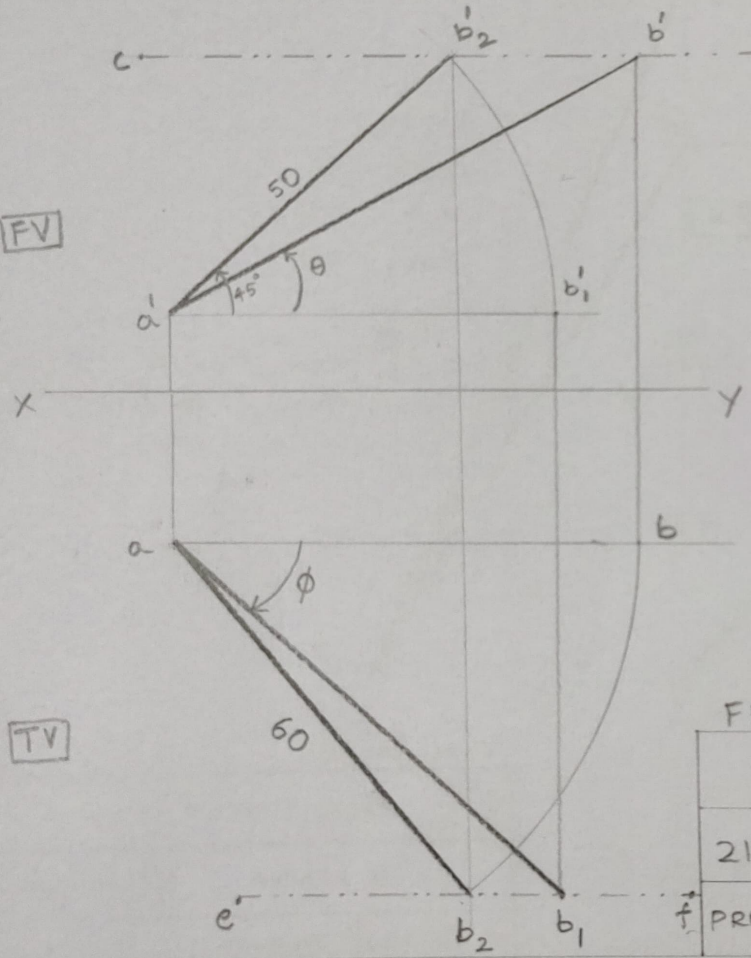
SCALE 1:1



GIVEN:

- Positions of a', a
- angle of $a'b'_2$ with XY (45°)
- $a'b'_2 = a'b'_1 = 50$
- $ab_2 = ab = 60$

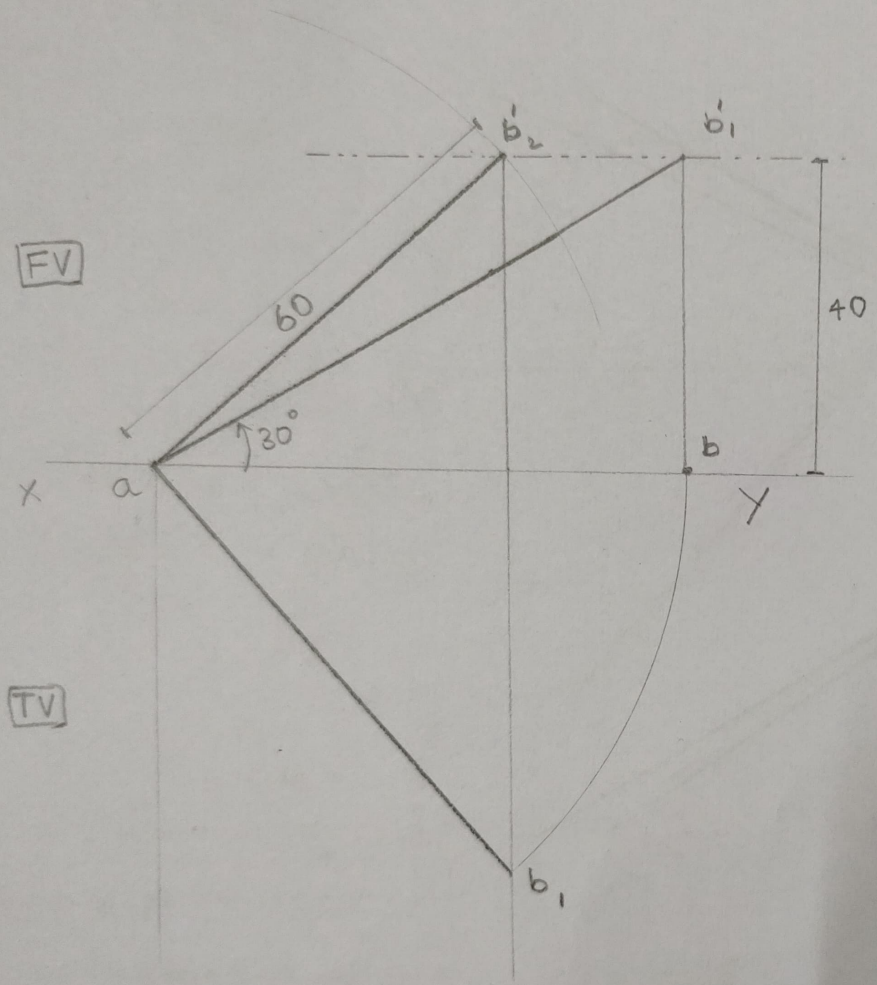
TO SOLVE:-

- $a'b' = ab' = 70$ (True length)
- $\theta = 30°$ (True inclination with H.P.)
- $\phi = 45°$ (True inclination with V.P.)

FIRST ANGLE

SATHVIK KANNA
2100700077 LAB 2 : QUESTION 1
PROJECTIONS OF POINTS, LINES, AUXILIARY PLANES

SCALE 1:1



GIVEN

- Position of a, b'_2
- $ab'_2 = 60$, $bb'_1 = 40$
- angle of ab'_1 with XY / H.P.

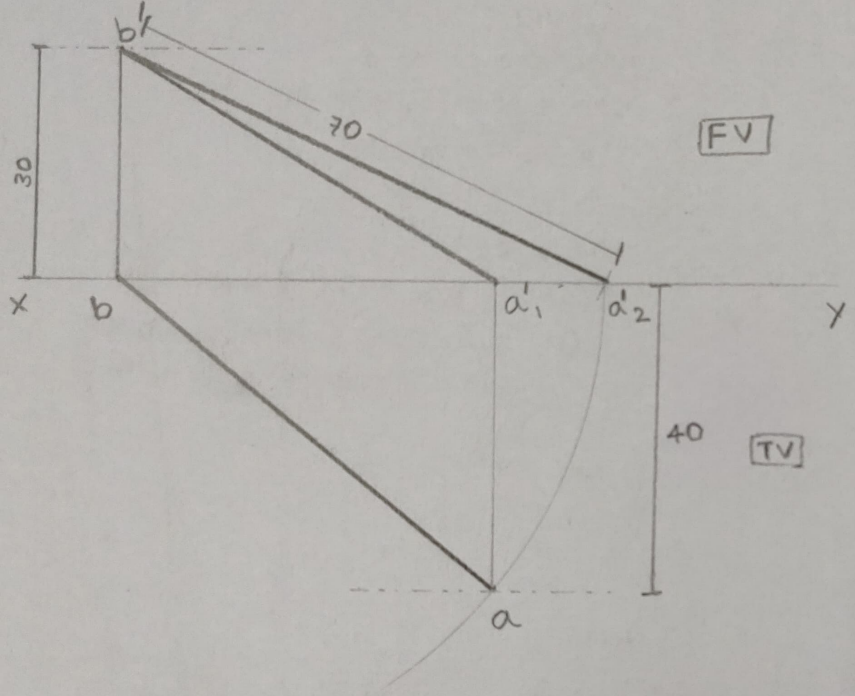
TO SOLVE:-

$ab'_1 = 80$ (True length)

FIRST ANGLE

LAB2: PROJECTION OF LINES		
SATHVIK KANNA		Question2
4-04-2022	2100700077	P1

SCALE 1:1



GIVEN:-

bb' = 30

a a'1 = 40

b' a'2 = 70

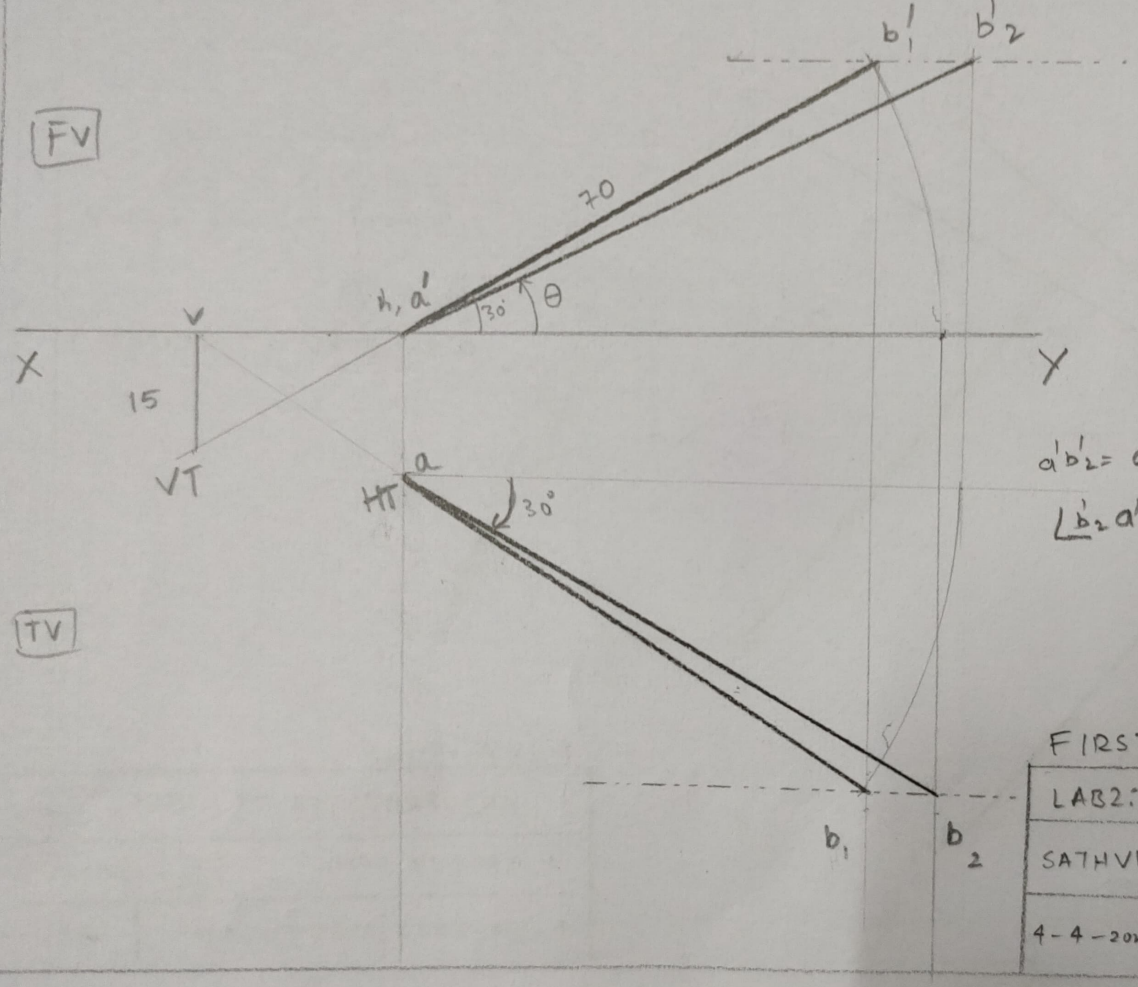
TO SOLVE

a', b' and ab are projections of the line.

FIRST ANGLE

LAB2 : PROJECTION OF LINES		
SATHVIK KANNA		Question3
04-04-2022	2100700077	P1

SCALE 1:1



GIVEN :-

$a'b_1' = 70$

angle $a'b_1'$ with XY = 30°

v.V.T. = 15

ab_2 with XY = 30°

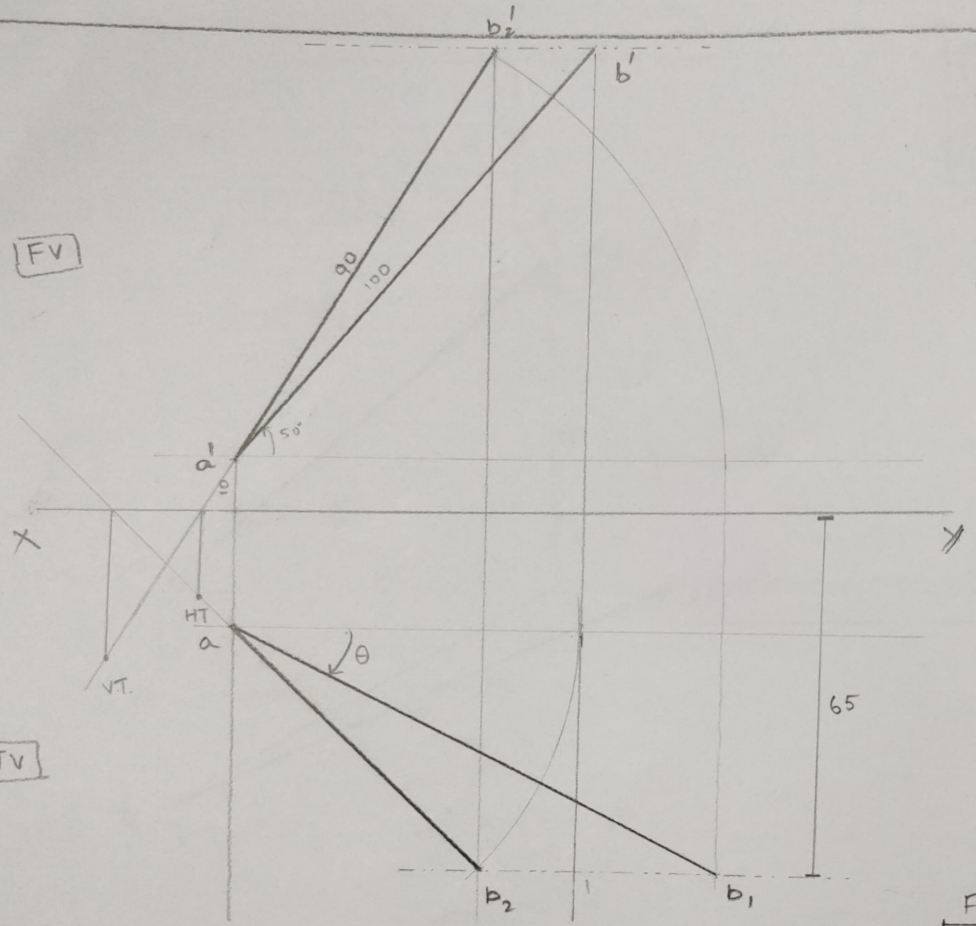
TO SOLVE :-

$a'b_2' = ab_2 = 80$ (True length)

$\angle b_2'a'Y = 25°$ (inclination angle to HP)

FIRST ANGLE

LAB2: PROJECTION OF LINES		
SATHVIK KANNA 1K3 Question4		
4-4-2022	2100700077	P1



GIVEN:-

$a'b_2' = 90$

$a'b' = 100$

$\angle b'a' = 50°$

a' from XY = 10

b_2 from XY = 65

TO SOLVE:-

$\theta = 25.8°$ (True inclination with VP)

FIRST ANGLE

LAB2: PROJECTION OF LINES		
SATHVIK KANNA Question 5		
4-4-2022	210070077	P1

SCALE : 1:1

GIVEN

$a'b'_2 = 100$

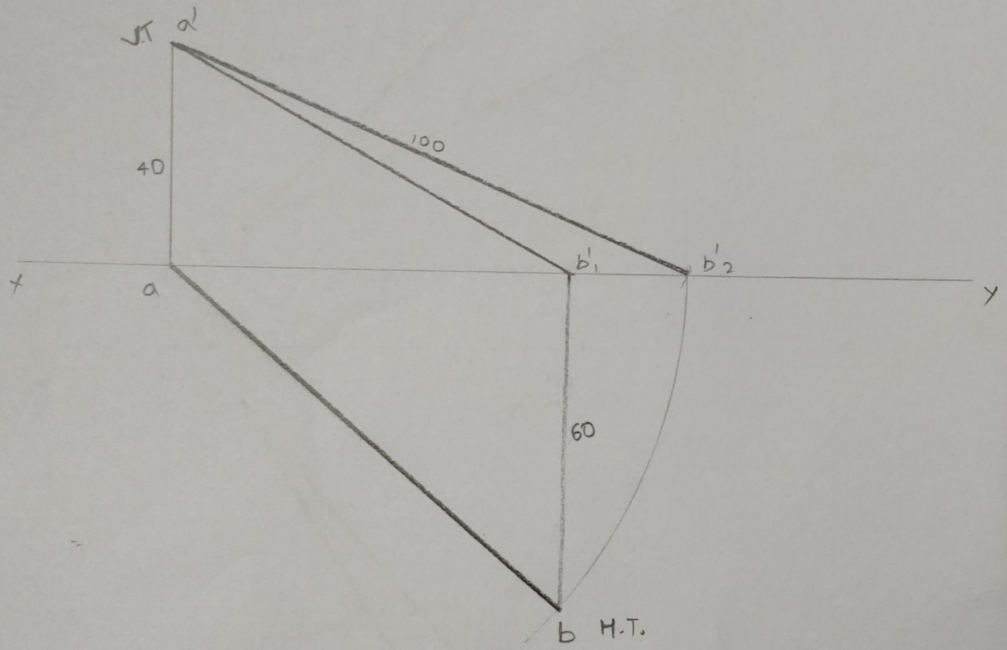
$a'a = 40$

$b'_1b = 60$

TO SOLVE

H.T = b

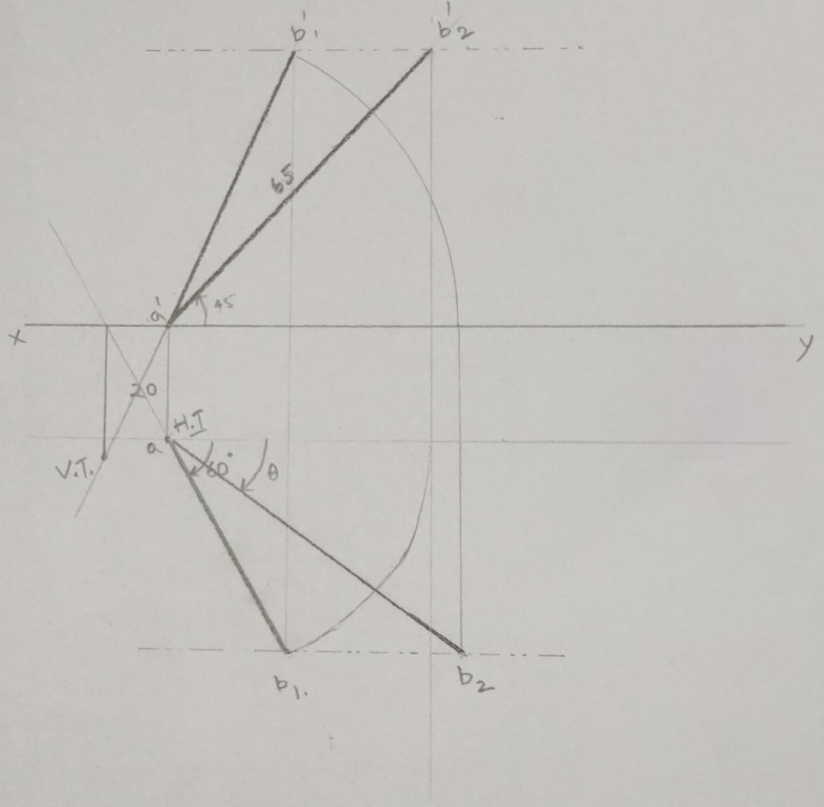
V.T = a'



FIRST ANGLE

LAB 2 : PROJECTION OF LINES		
SATHVIK KANNA Question : 6		
4-4-2022	210070077	P1

SCALE - 1:1



GIVEN:

$aa' = 20$

$\angle b_1 a = 60°$

$\angle b_2' a' = 45°$

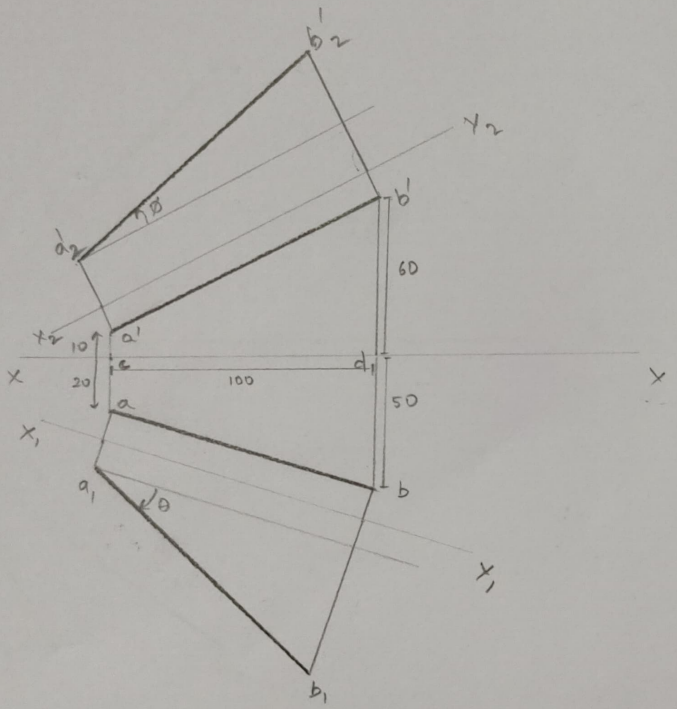
$a' b_2' = 65$

TO SOLVE

$\theta = 37°$ (inclination with VP)

LAB2 : PROJECTION OF LINES		
SATHVIK KANNA VE Question 7		
4-4-2022	210070077	P1

SCALE : 1:2



GIVEN

cd = 100

ca' = 10, db' = 60

ca = 20, db = 50

TO SOLVE

a1b1 = a'2b'2 = 55 (true length)

θ = 25° (true inclination with V P)

ϕ = 15° (true inclination with HP)

LAB 2 : PROJECTION OF LINES		
SATHVIK KANNA KE Question 8		
4-4-2022	2100700077	P1