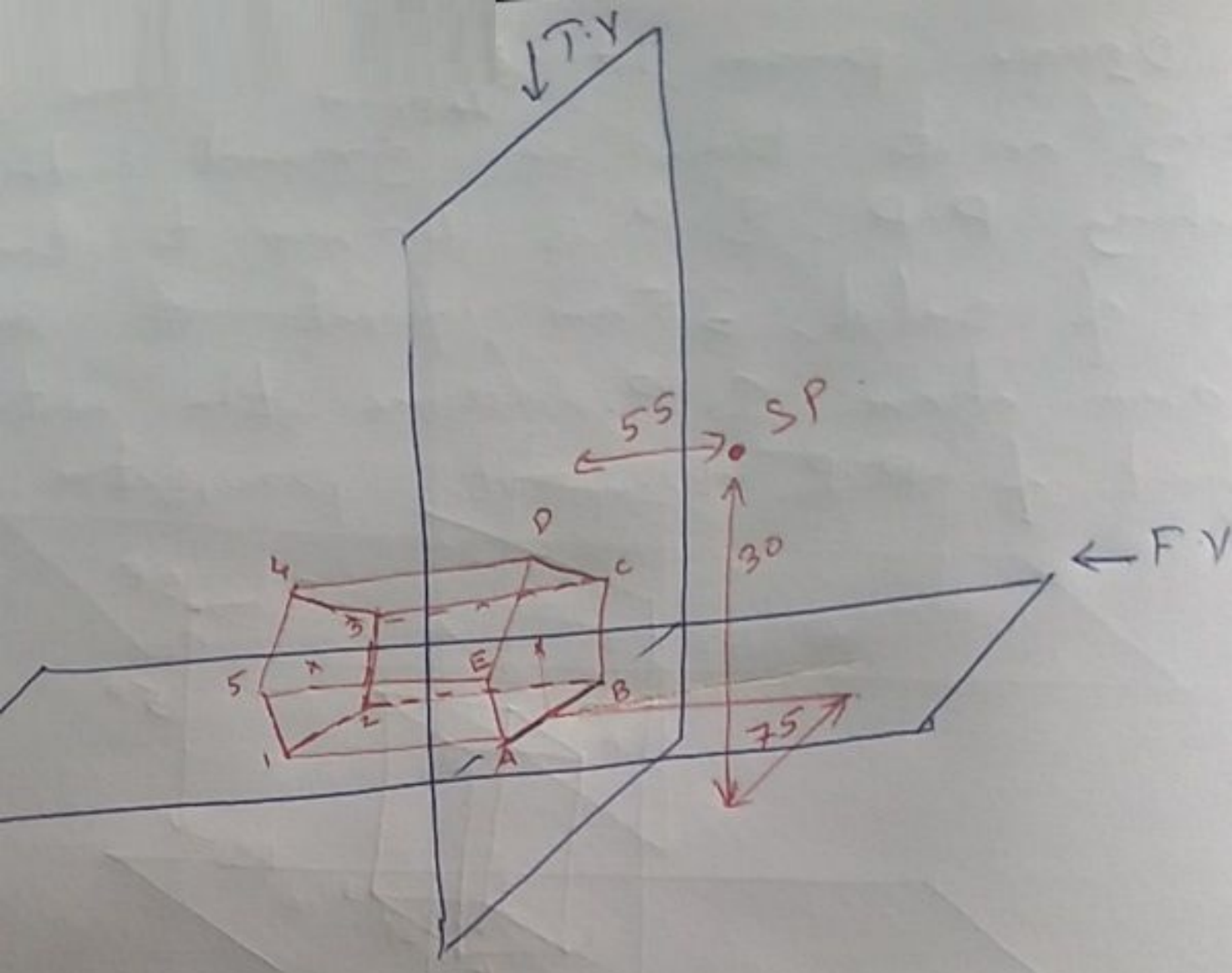
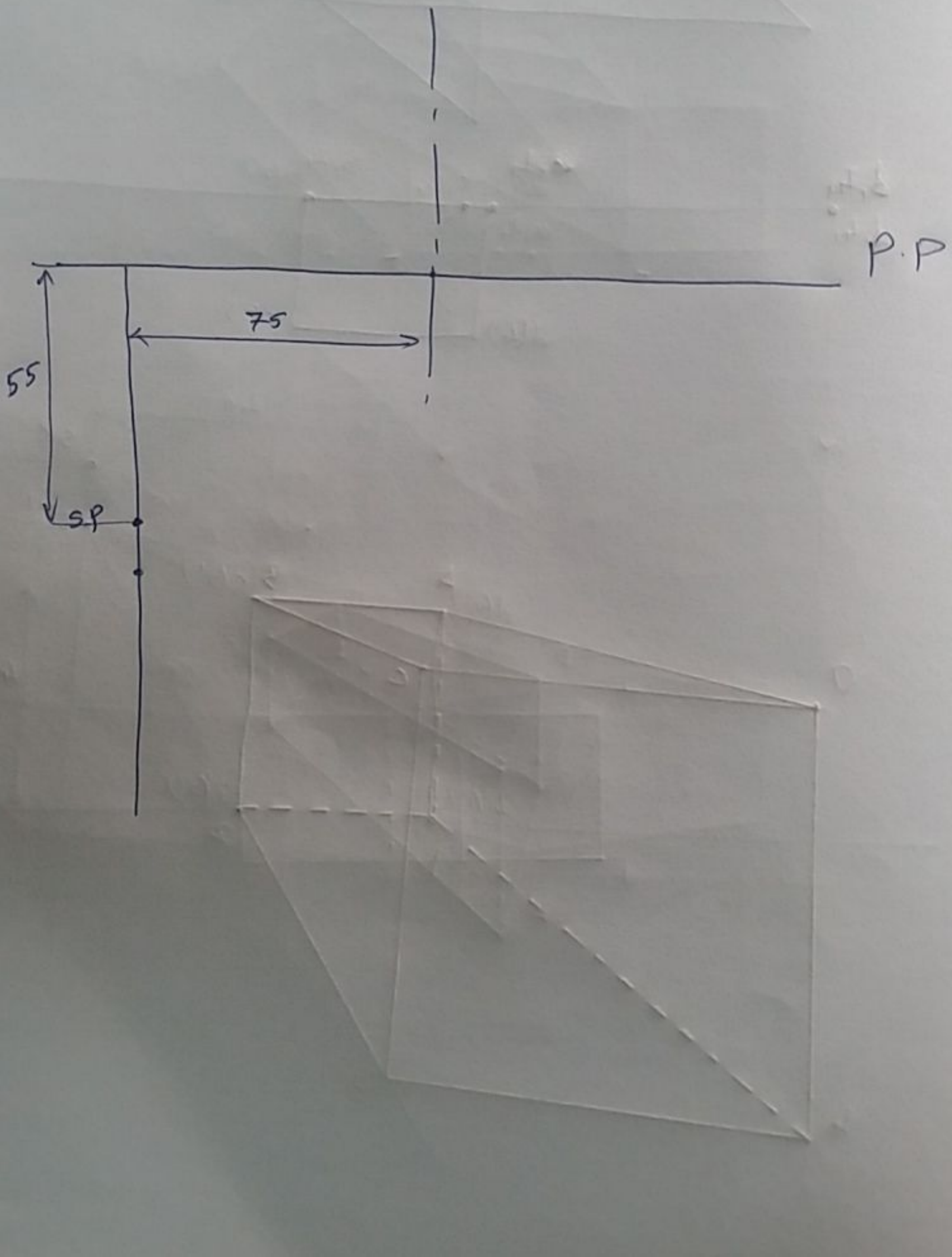
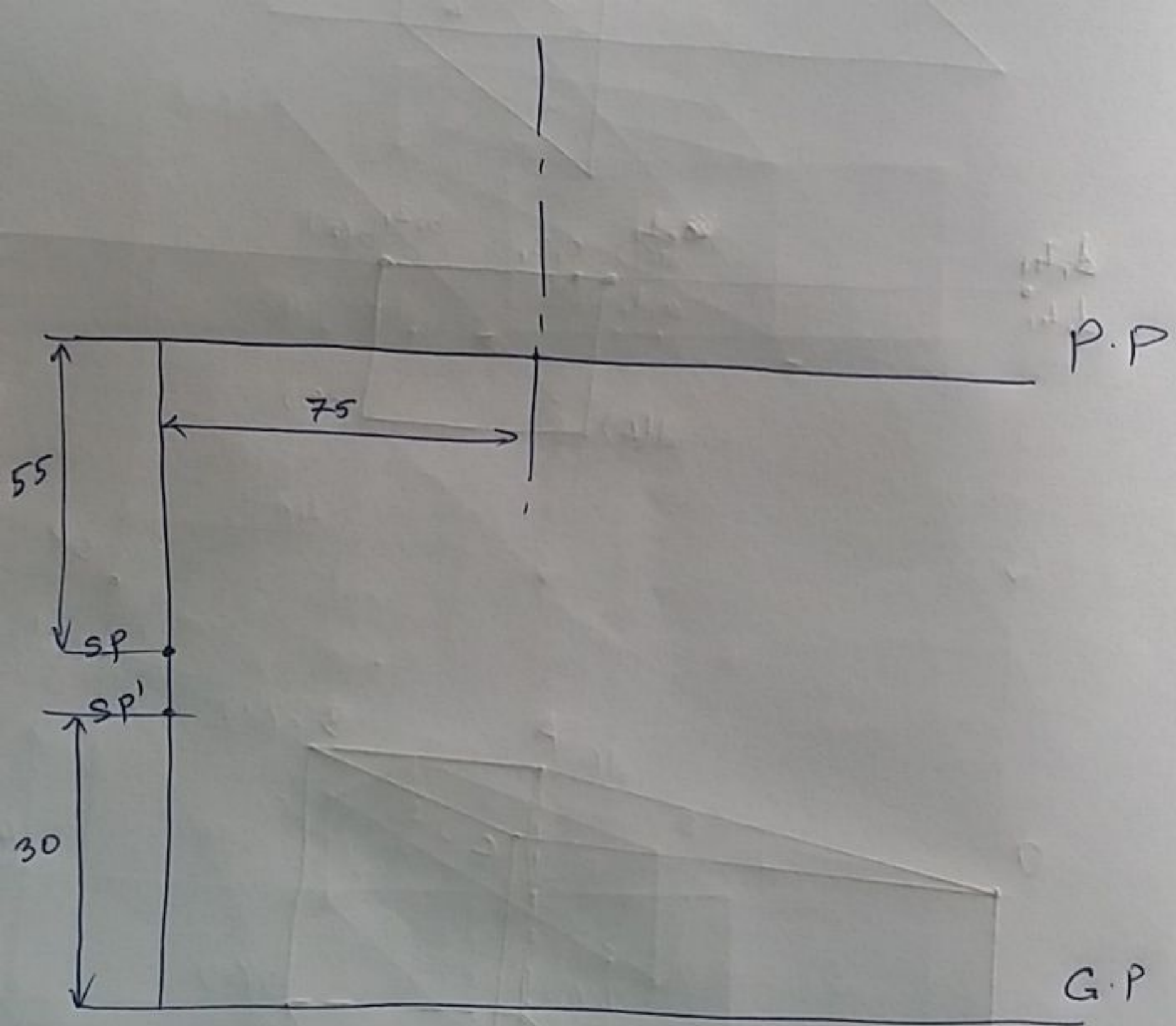
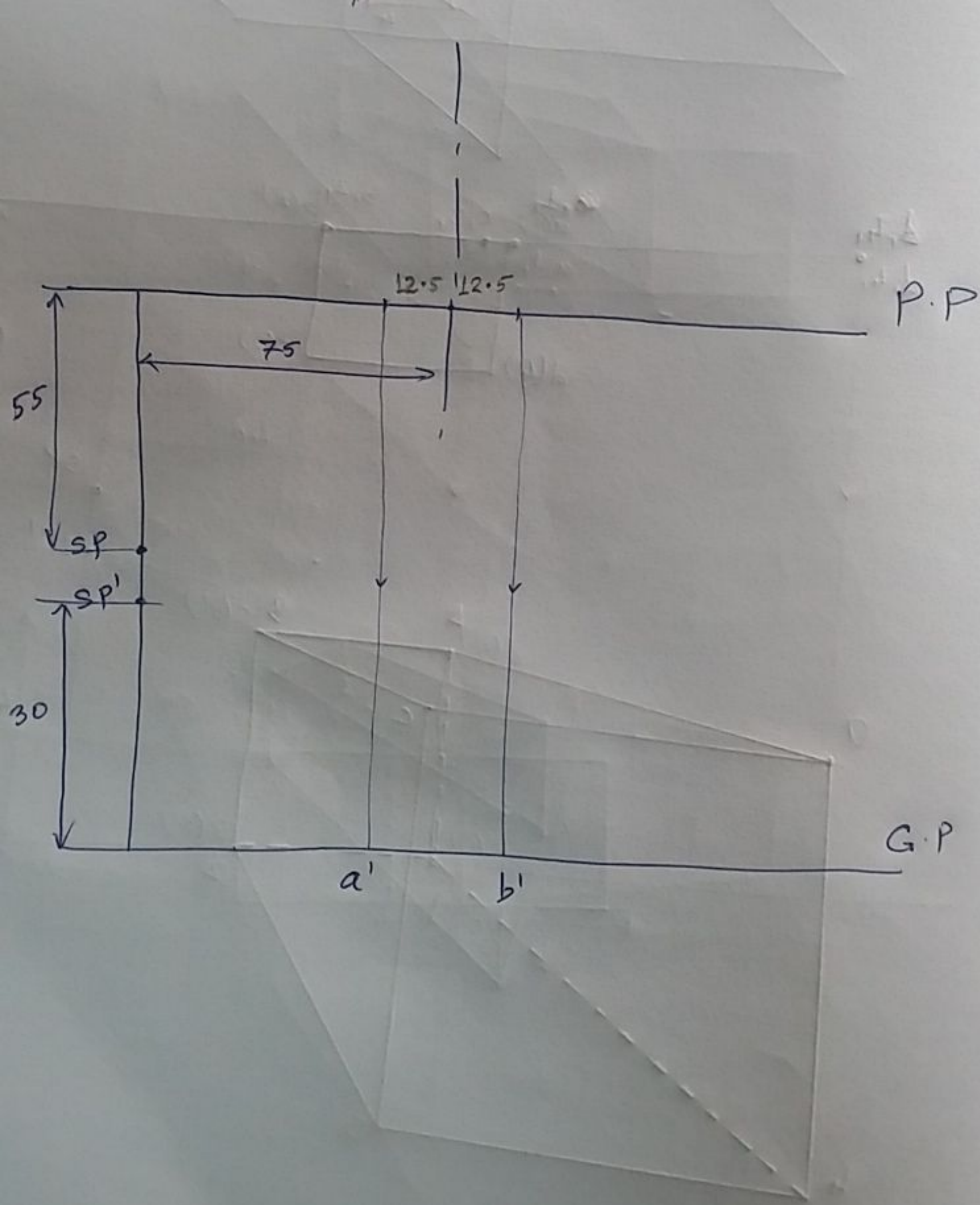
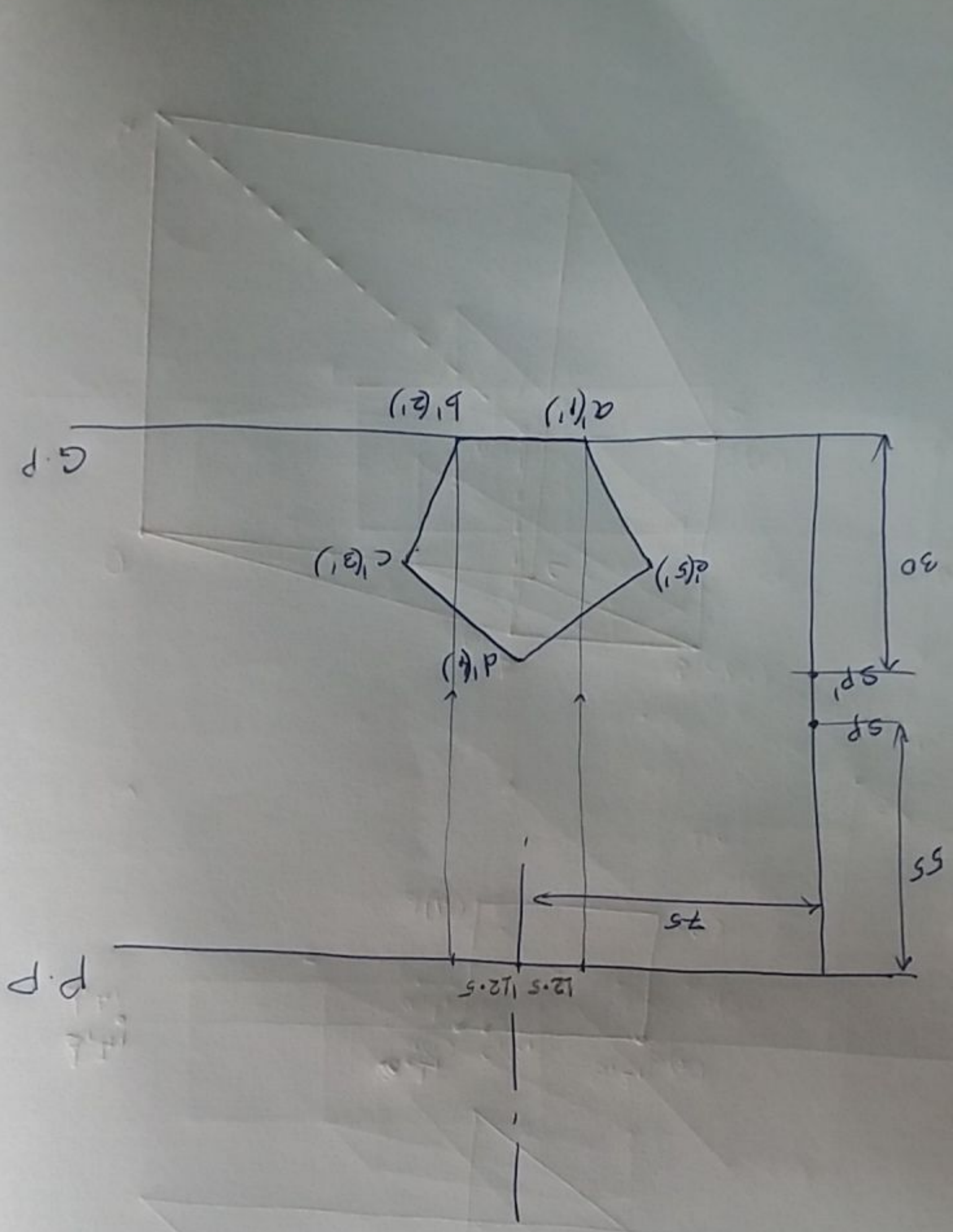
Draw the perspective projection of a pentagonal prism of side 25 mm and length 50 mm, lying on one of its rectangular faces on the ground plane and one pentagonal face touching the picture plane. The station point is 55 mm in front of the picture plane and lies in the central plane which is 75 mm to the left of the centre of the prism. Station point is 30mm above the ground plane.

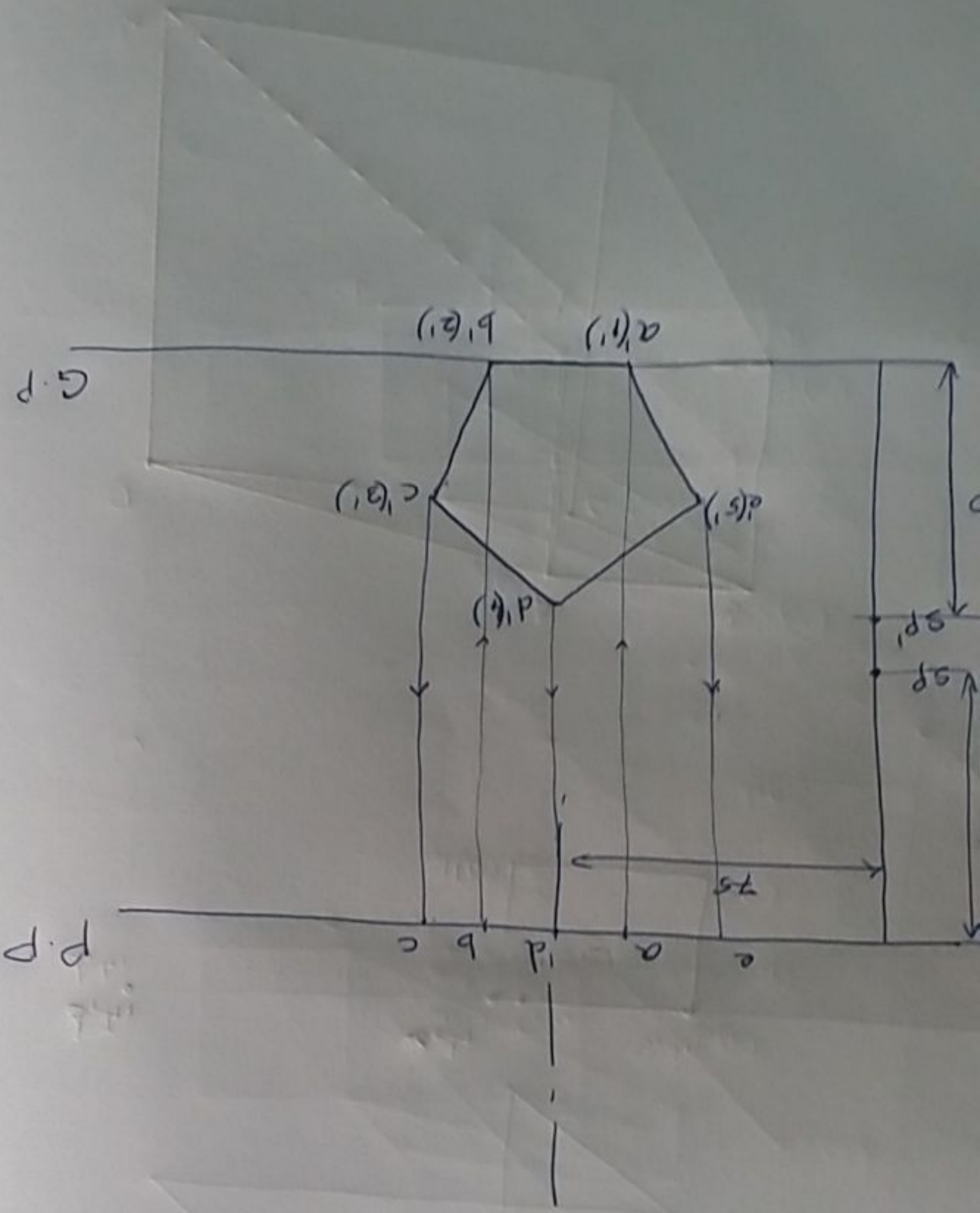

T.V
55
SP
30
F.V
D
C
4
3
5
E
B
2
1
A
75

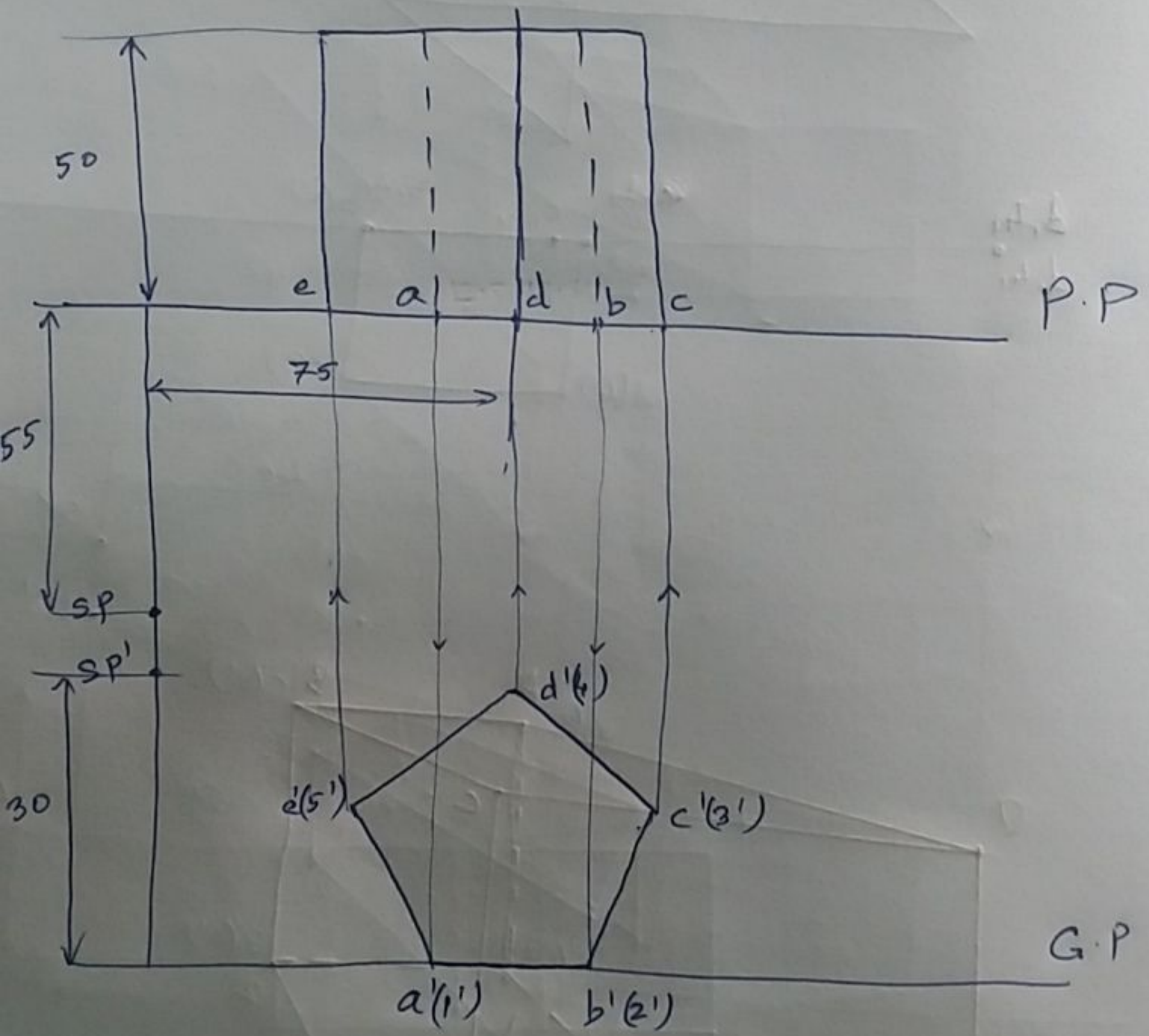

P.P
75
55
SP

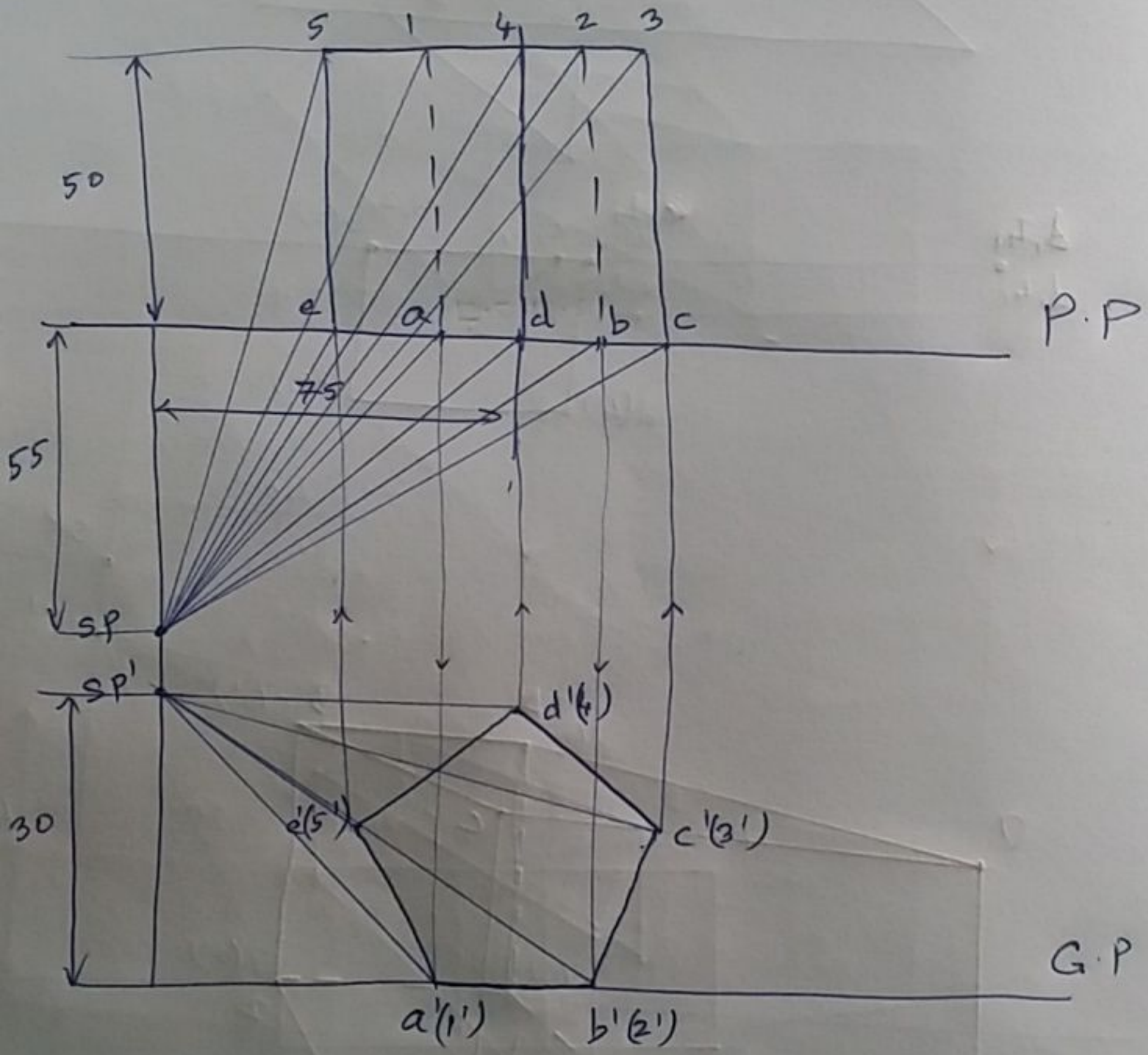

P.P
75
55
S.P
S.P'
30
G.P

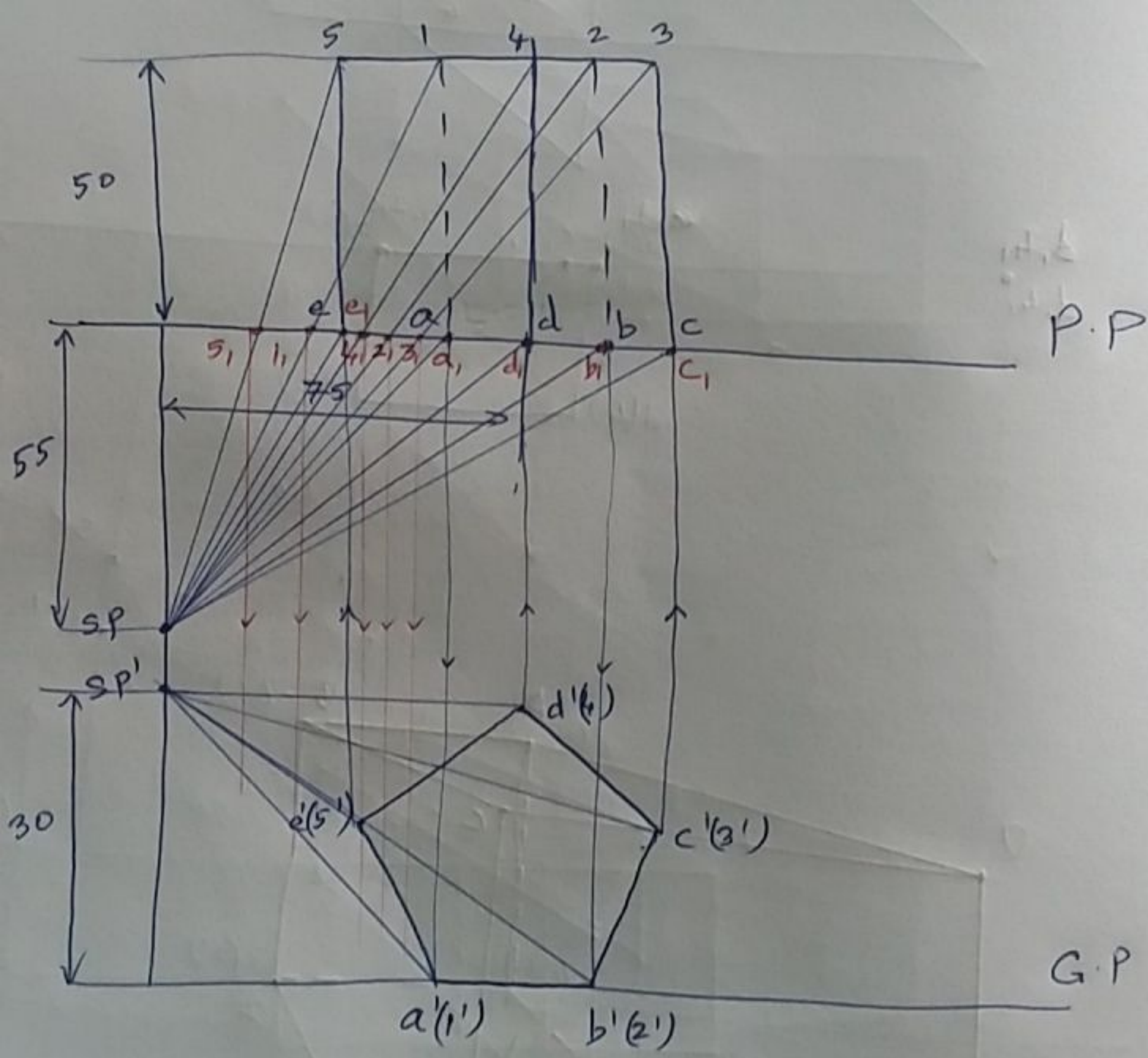

12·5
12·5
P.P
75
55
SP
SP'
30
G·P
a'
b'

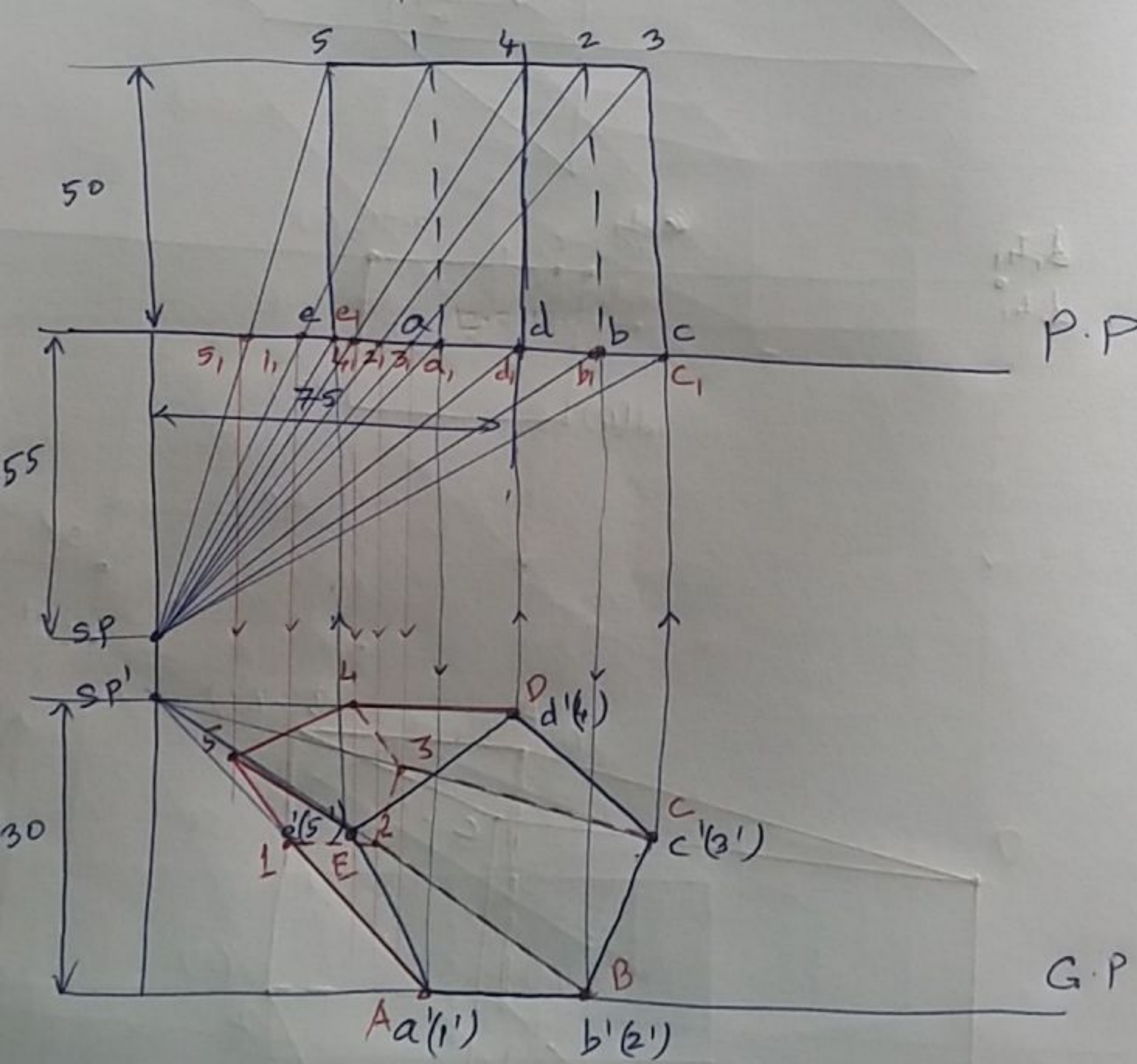

G.P
a'(1')
b'(2')
c'(3')
d'(5')
d'(4')
30
SP'
SP
55
75
12·5
12·5
P.P


G.P
P.P
a'(1')
b'(2')
c'(3')
d'(4')
(5),P
SP'
SP
75
a
b
c
P1
2
3

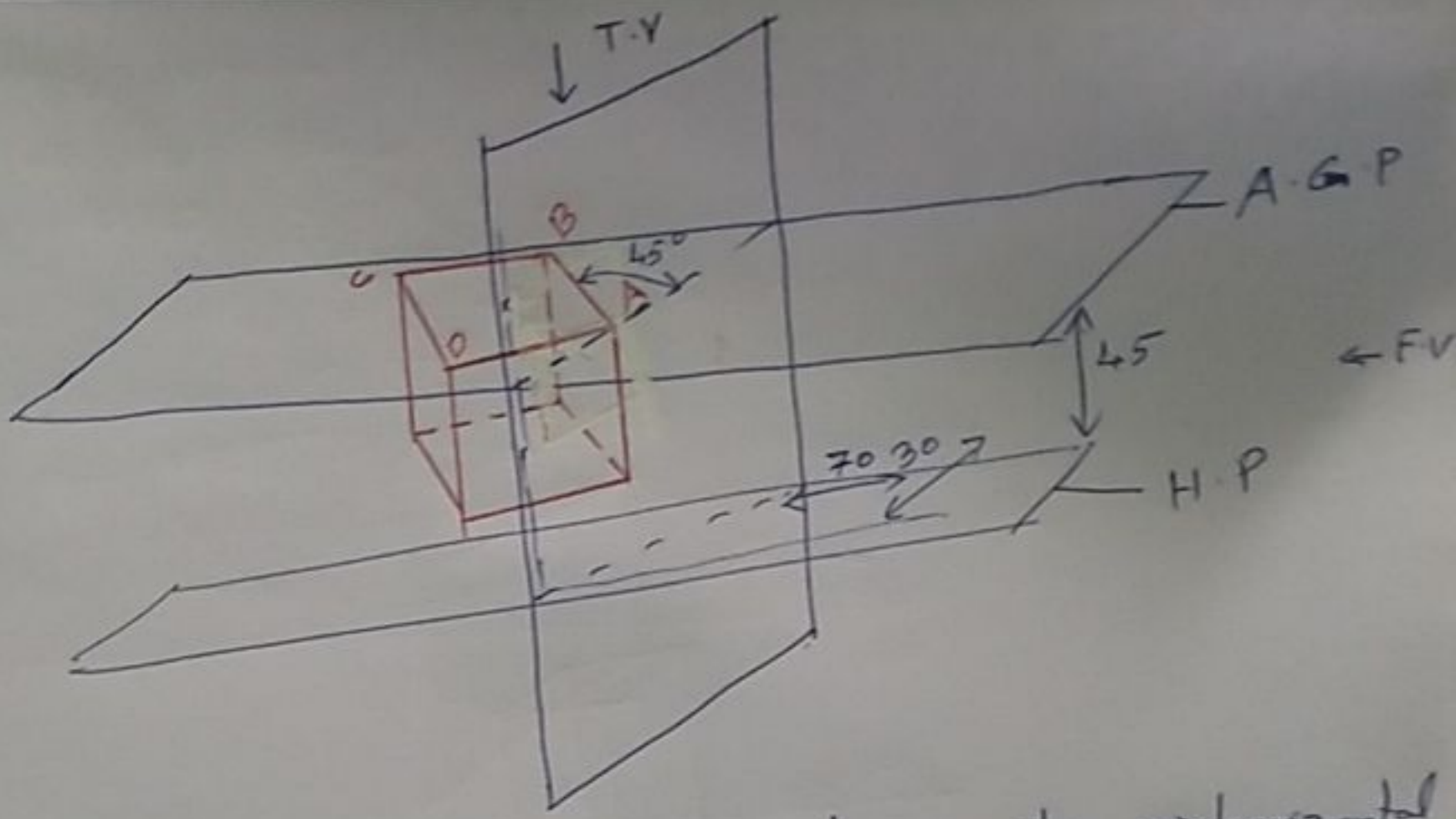

50
e
a
d
b
c
P.P
75
55
SP
SP'
d'(4')
30
e'(5')
c'(3')
G.P
a'(1')
b'(2')


5
1
4
2
3
50
e
a
d
b
c
P.P
75
55
SP
SP'
d'(4')
30
e'(5')
c'(3')
G.P
a'(1')
b'(2')

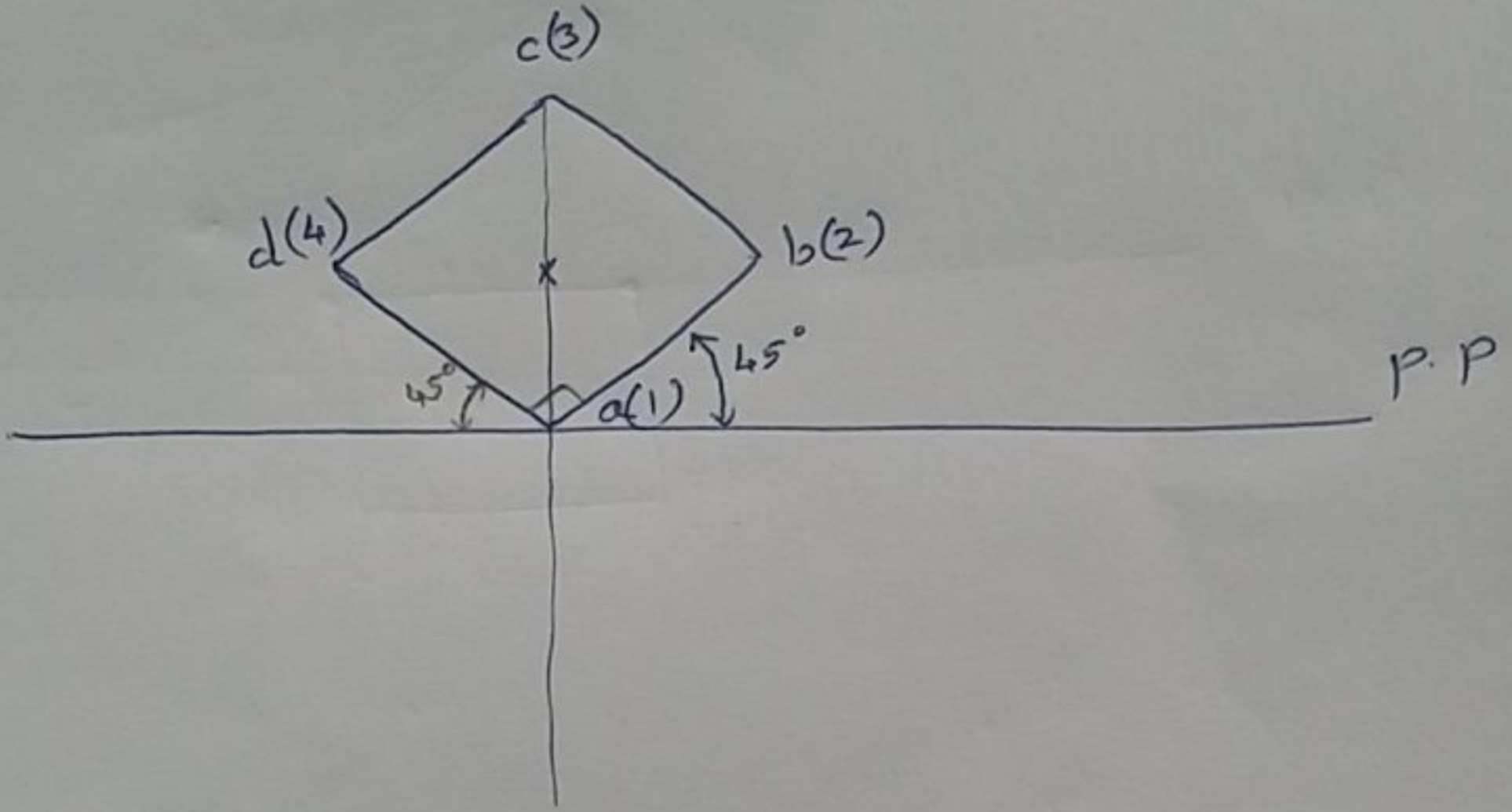

5
1
4
2
3
50
e
e1
a
d
b
c
P.P
5,
1,
4,
2,
3,
a,
d,
b,
c,
75
55
SP
SP'
d'(4')
e'(5')
c'(3')
30
G.P
a'(1')
b'(2')

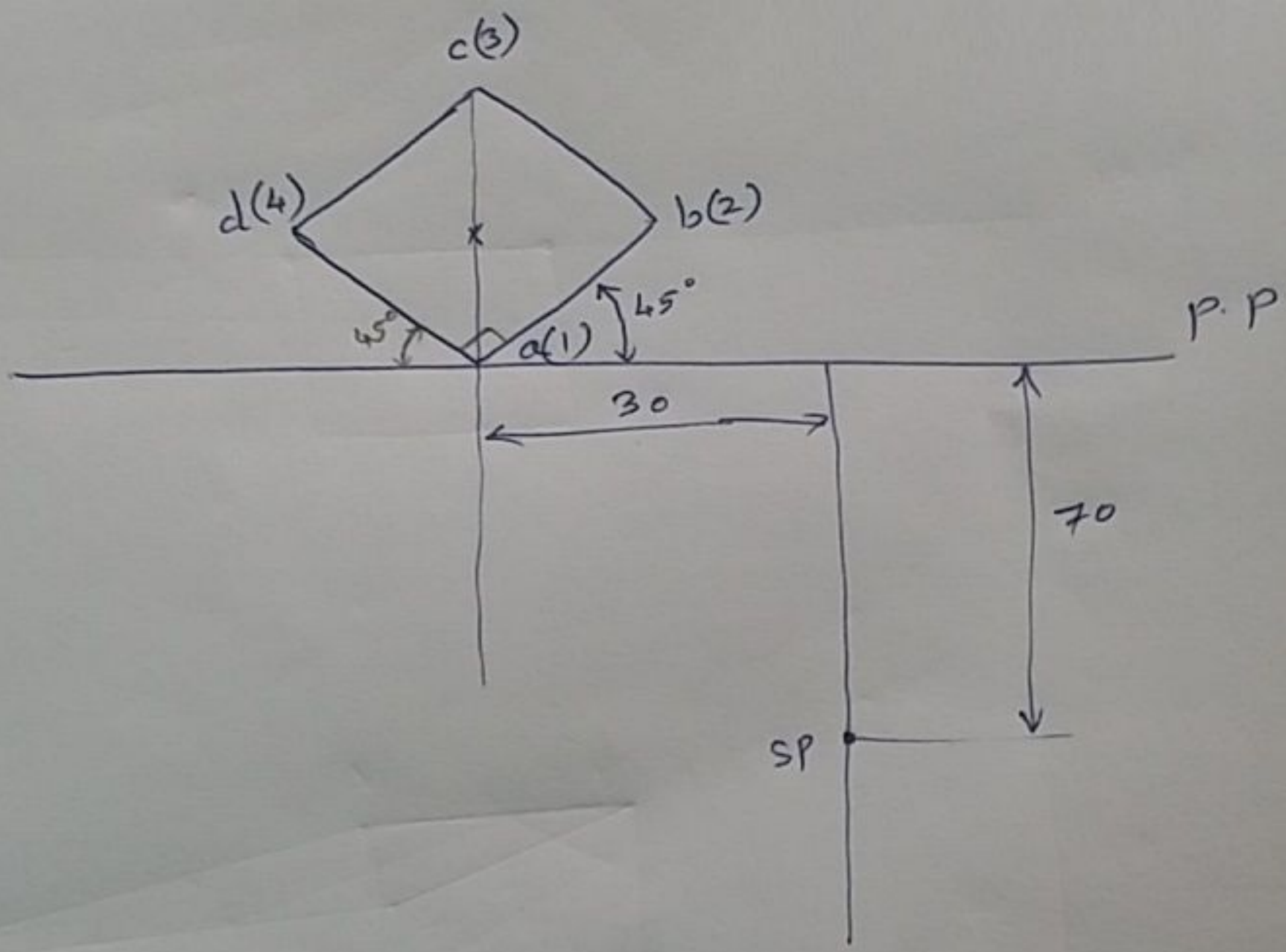

5
1
4
2
3
50
e
e1
a
d
b
c
P.P
5,
1,
4,
2,
3,
a,
d,
b,
c1
75
55
SP
SP'
4
D
d'(4')
5
3
C
30
1'(5')
2
C'(3')
1
E
B
G.P
A
a'(1')
b'(2')

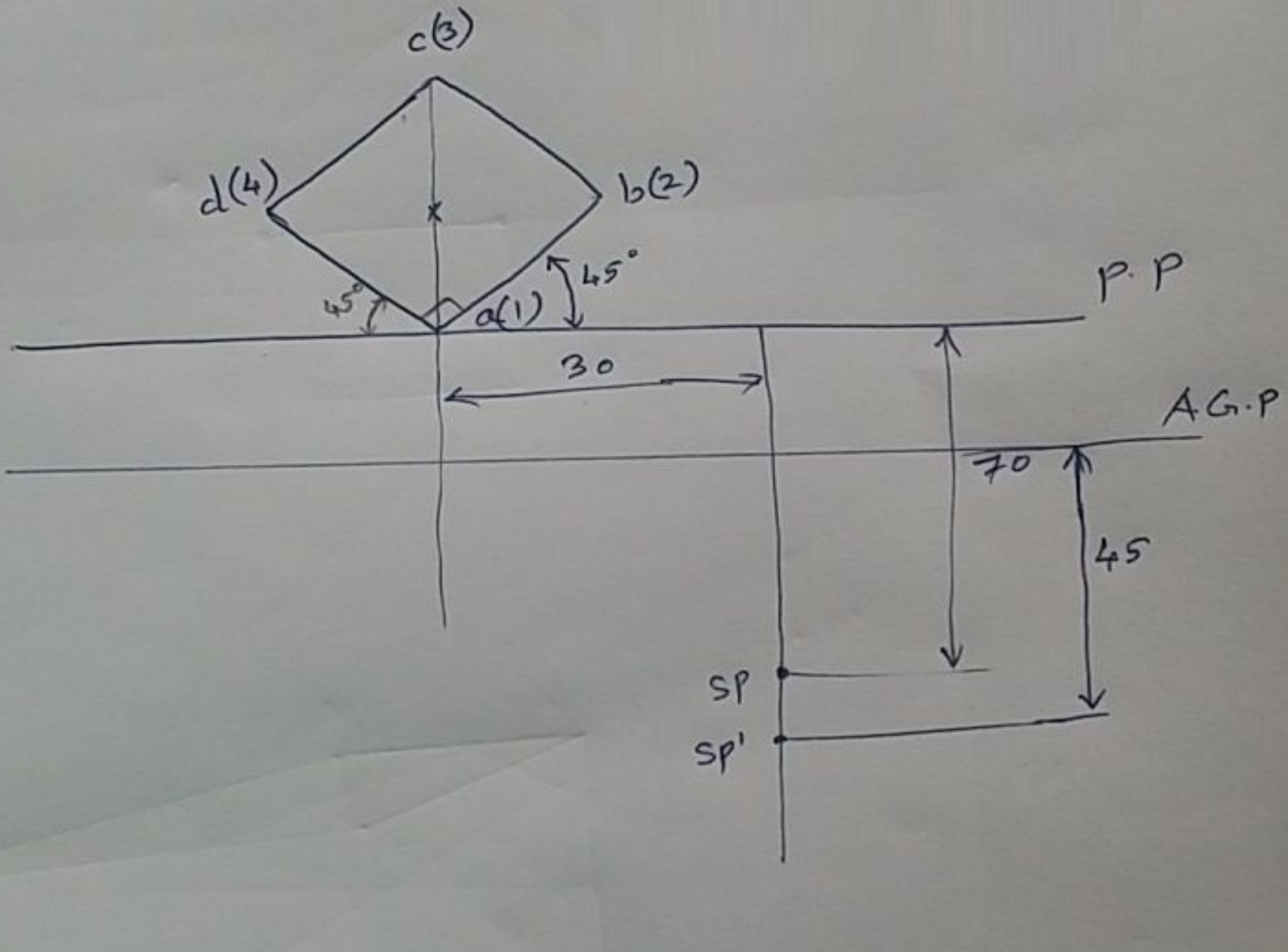
A cube of 25 mm side is placed vertically with one of its edges on the picture plane and the top square end face touching an auxiliary ground plane at a height of 45 mm above the horizon plane. The vertical edge formed by the two adjacent rectangular faces which are inclined at 45^0 to the picture plane, touches the picture plane. Draw the perspective view of the cube if the station point is 70 mm in front of the picture plane and lies in the central plane which is 30 mm to the right side of the centre of the cube.

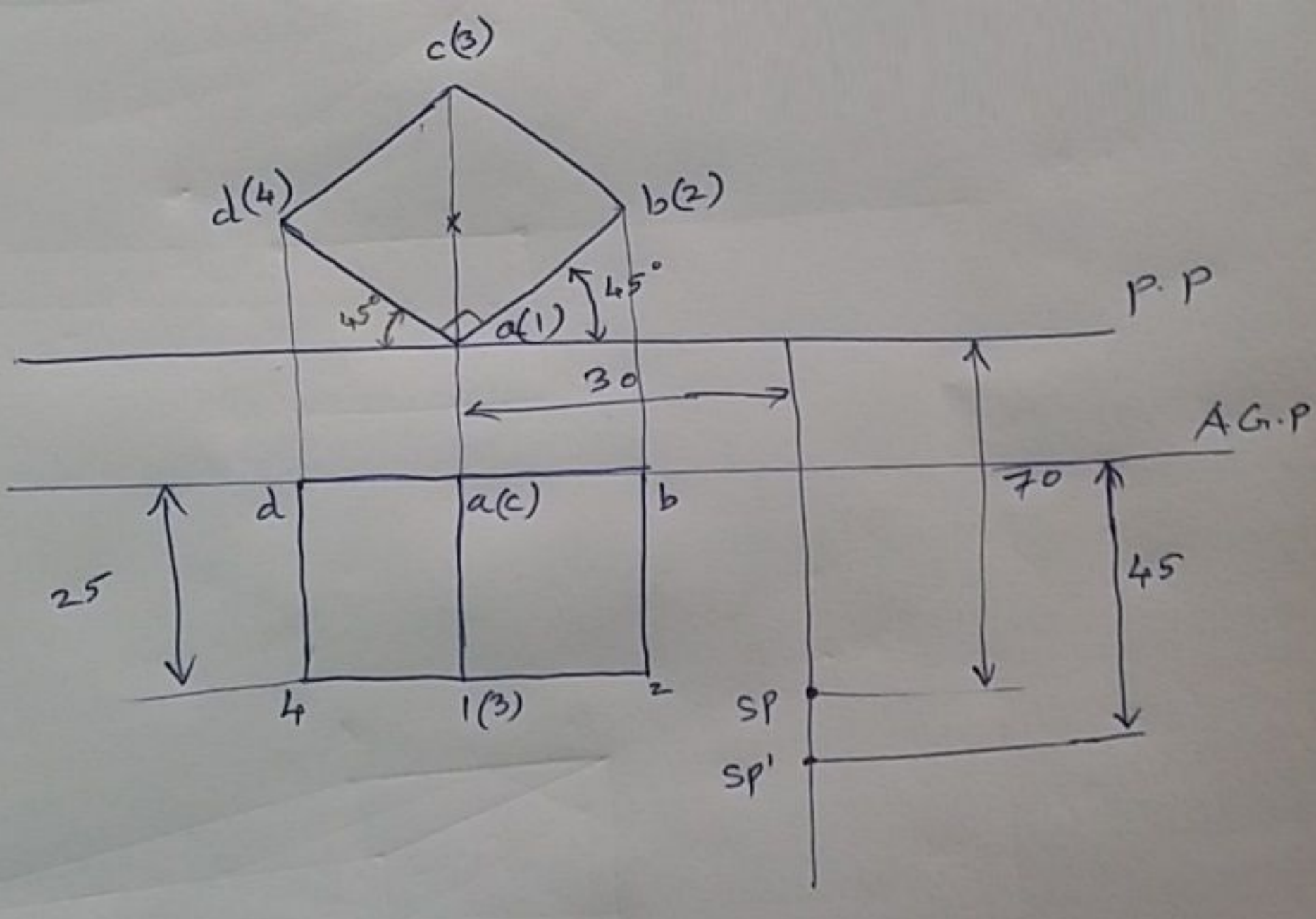


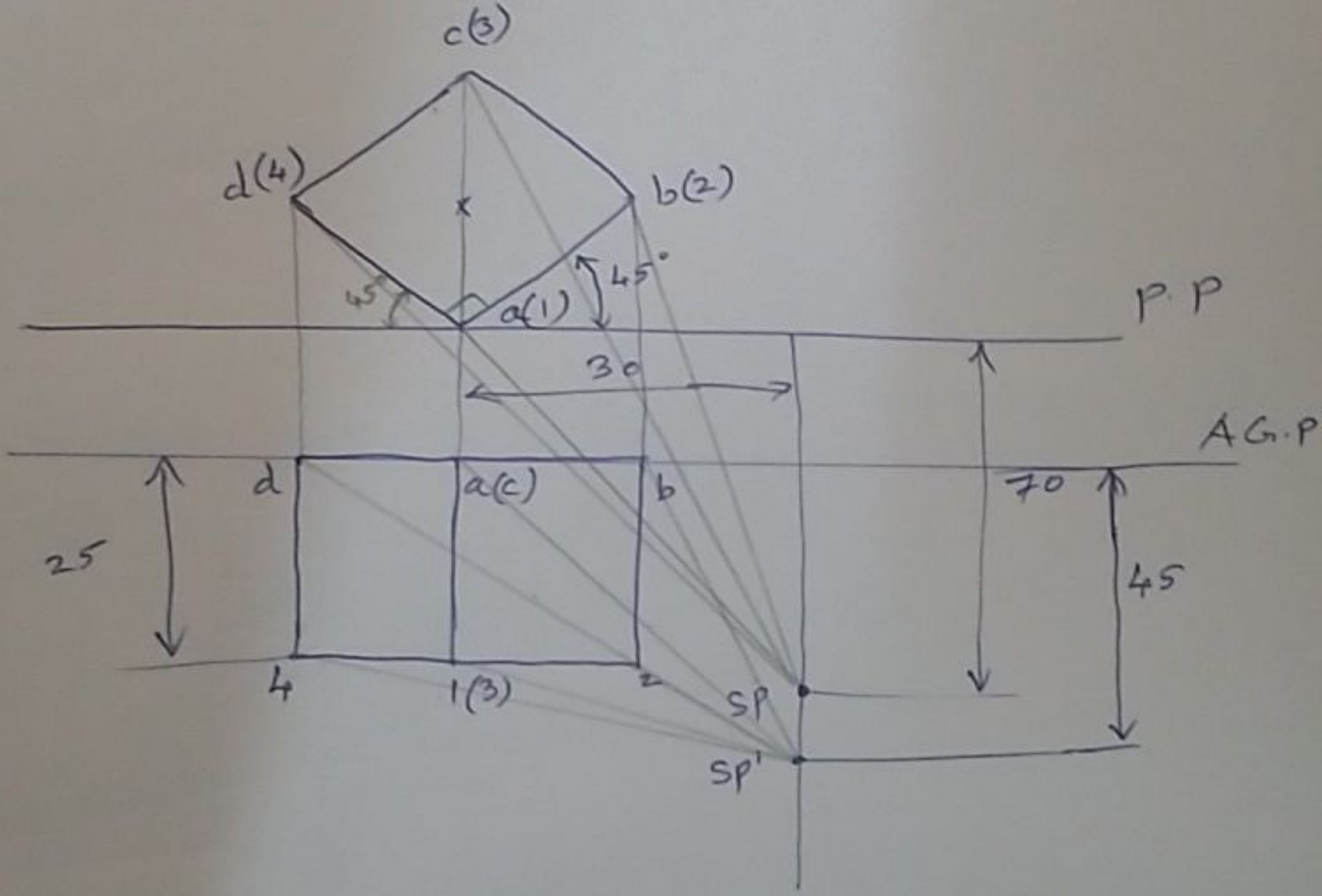
horizon plane ⇒ horizontal plane
(passing through s.p)

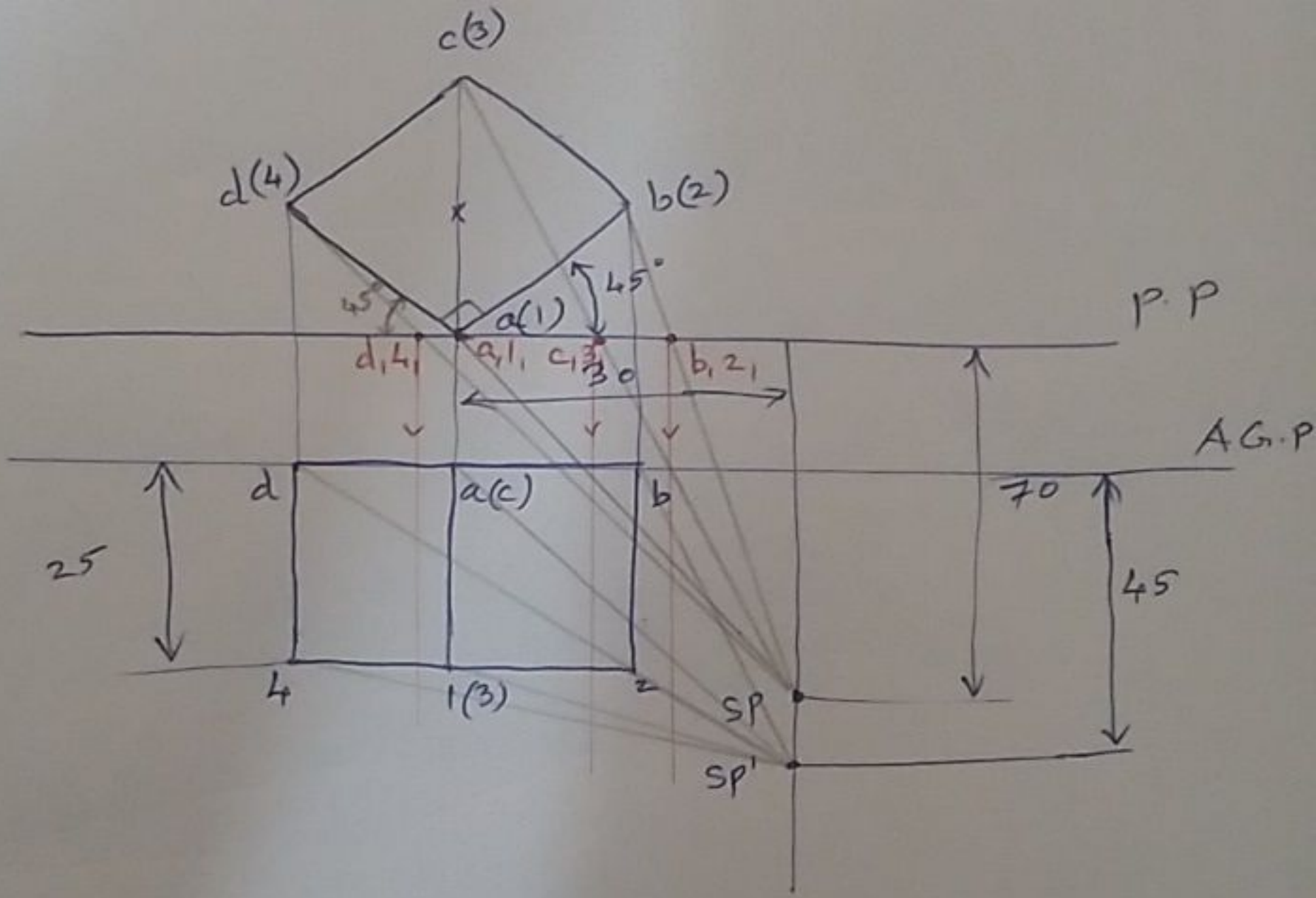

c(3)
d(4)
b(2)
45°
45°
a(1)
P. P

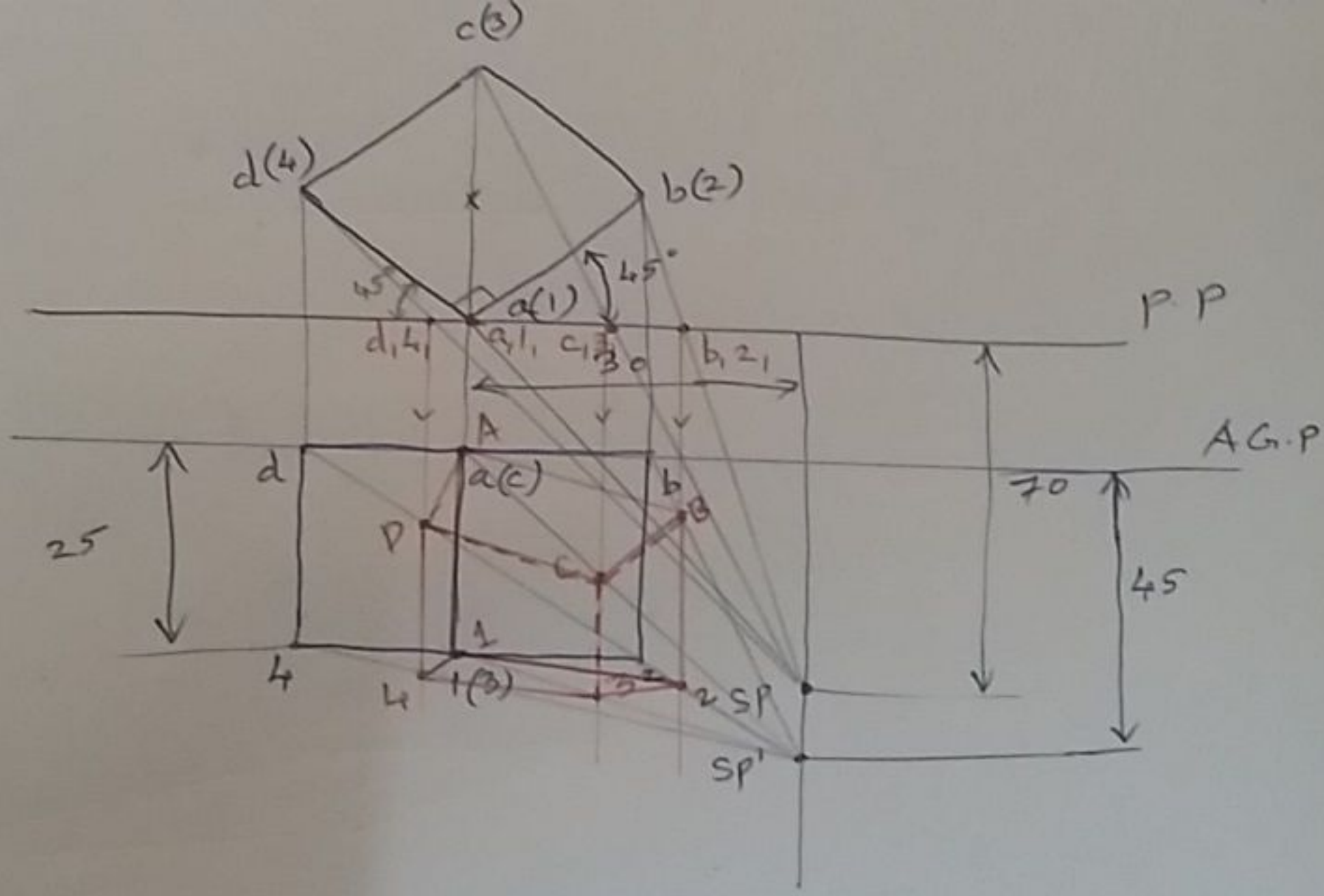

c(3)
d(4)
b(2)
a(1)
45°
45°
P. P
30
70
SP


c(3)
d(4)
b(2)
a(1)
45°
45°
P.P
30
A.G.P
70
45
SP
SP'


c(3)
d(4)
b(2)
x
45°
45°
a(1)
P.P
30
A.G.P
70
d
a(c)
b
25
45
4
1(3)
2
SP
SP'


c(3)
d(4)
b(2)
x
45°
45°
a(1)
P.P
30
A.G.P
d
a(c)
b
25
70
45
4
1(3)
2
SP
SP'


c(3)
d(4)
b(2)
x
45°
45°
a(1)
P.P
d,4,
a,1,
c,3,
30
b,2,
A.G.P
d
a(c)
b
25
70
45
4
1(3)
2
SP
SP'


c(3)
d(4)
b(2)
x
45°
45°
a(1)
P P
d,4,
a,1, c,3
30
b,2,
A
A G.P
d
a(c)
b
70
25
D
B
45
1
4
4
1(3)
2
SP
SP'