Problem:15.10 *A square prism , base edge 30 mm and height 60 mm is resting on a face with the axis inclined at 40° with PP and one of the vertical edges in PP. The station point is 50 mm to the right of the mid point of the axis ,30 mm in front of the picture plane and 50 mm above HP. Draw the perspective projection, if the solid is completely behind the PP.*

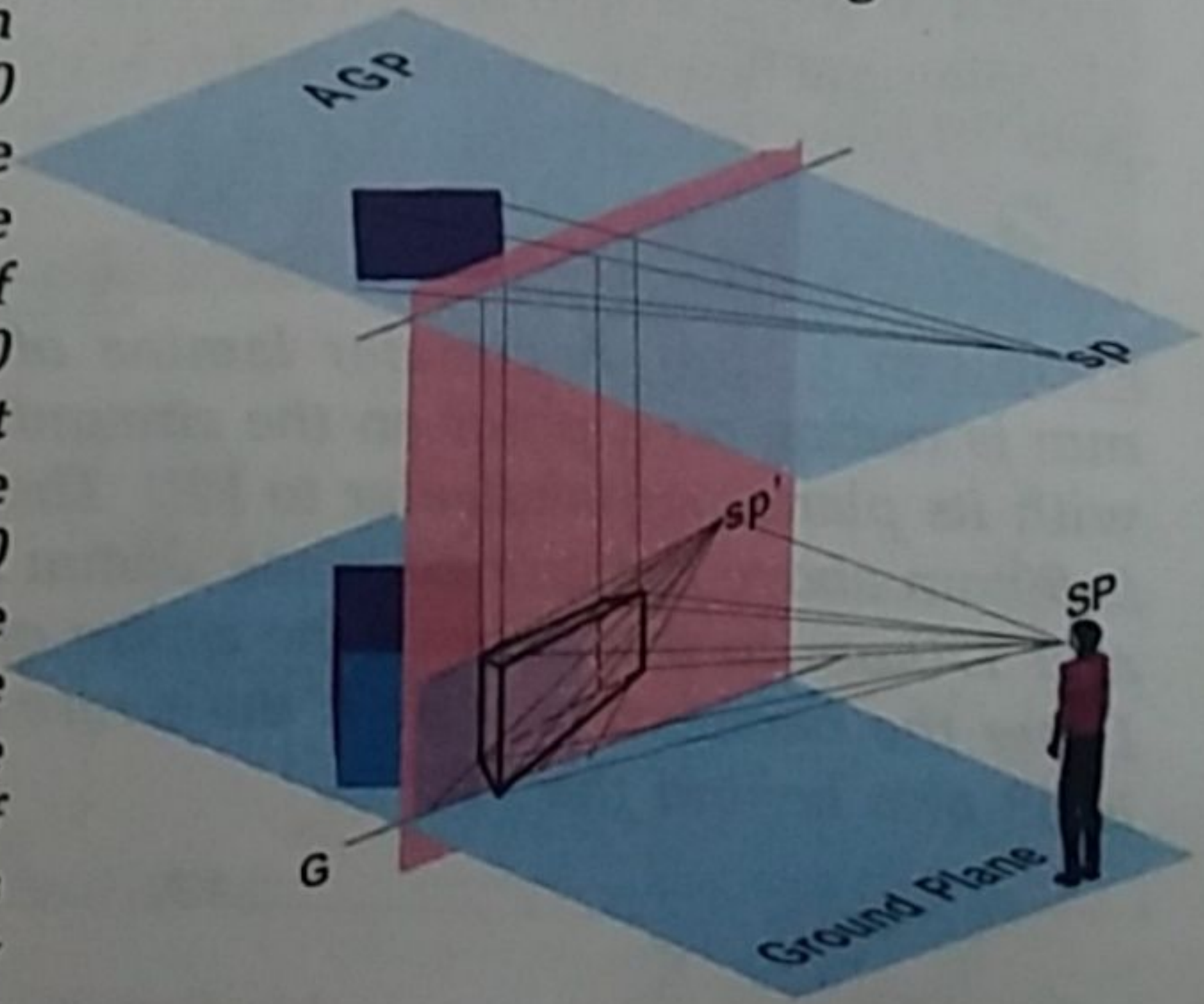
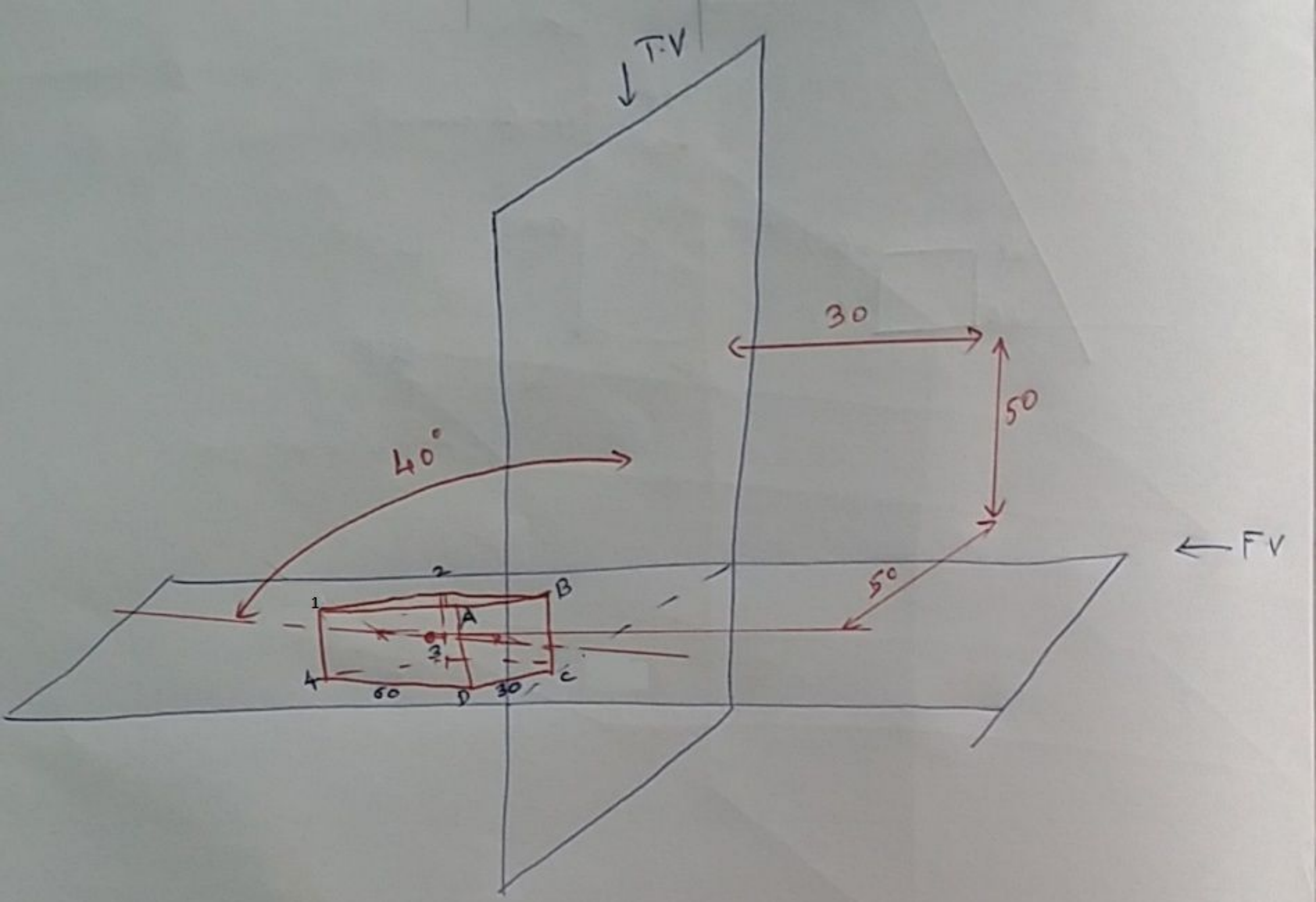
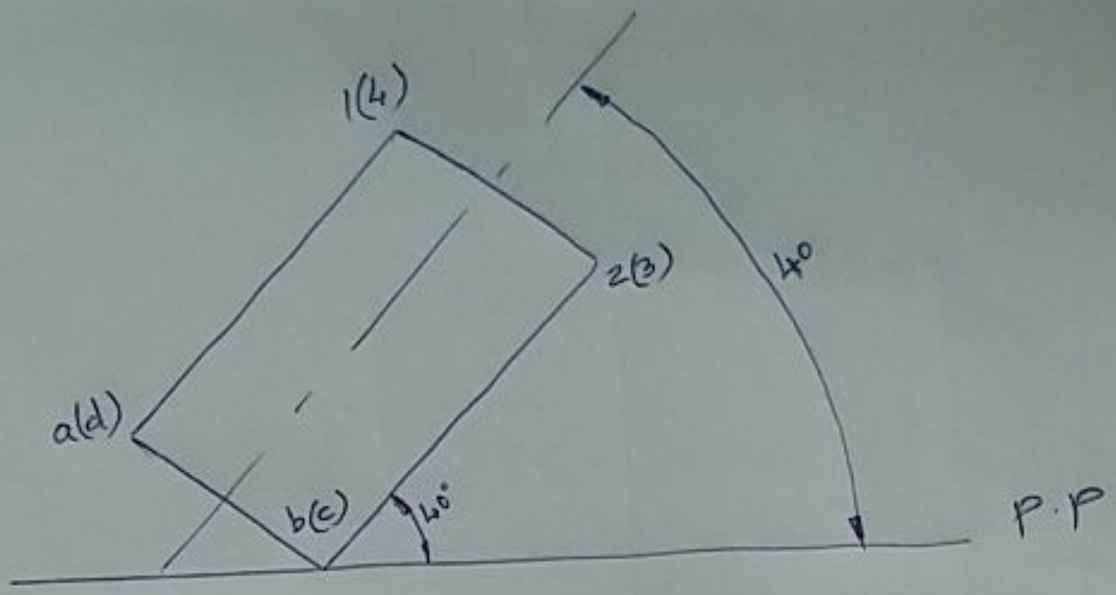
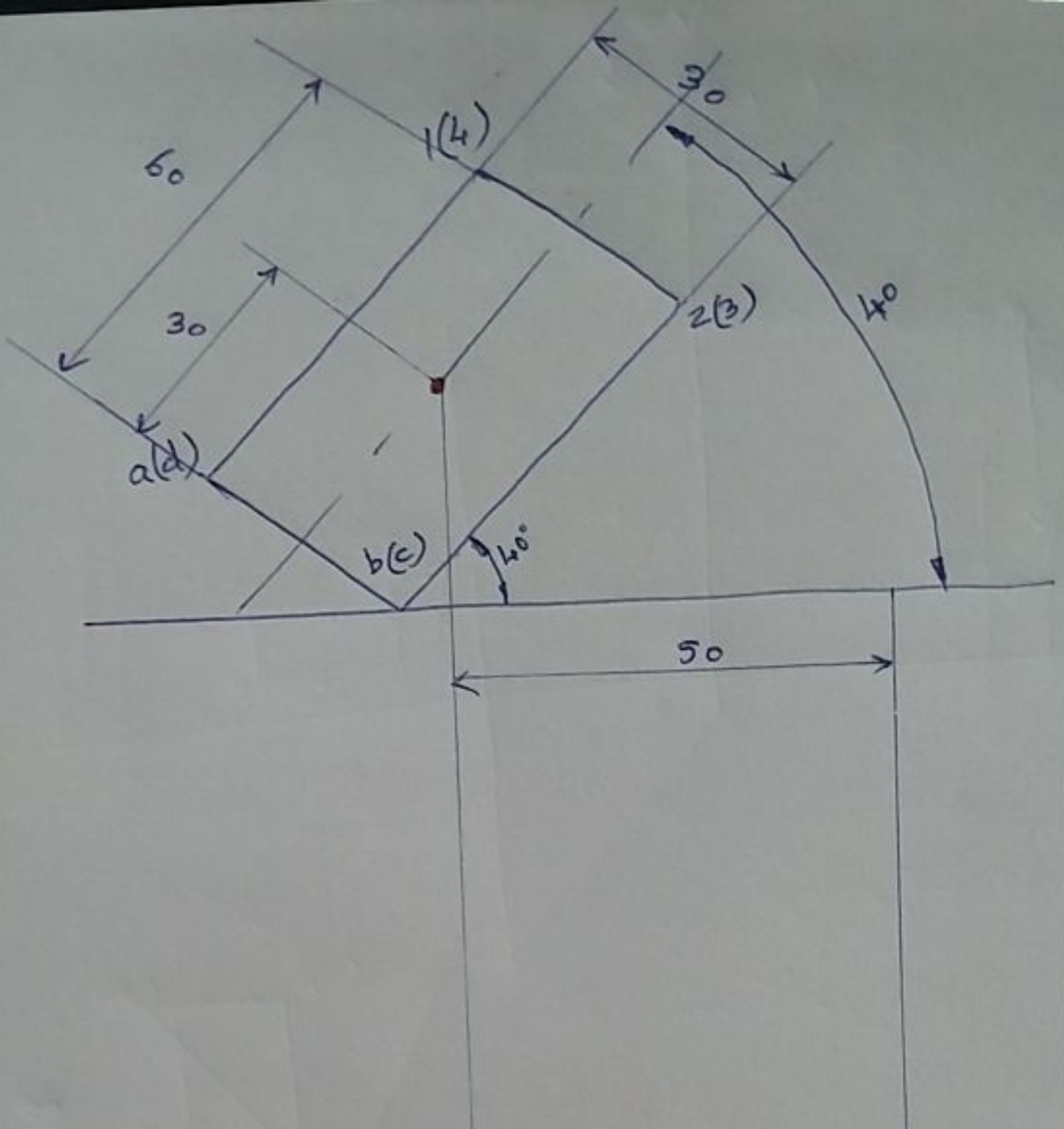
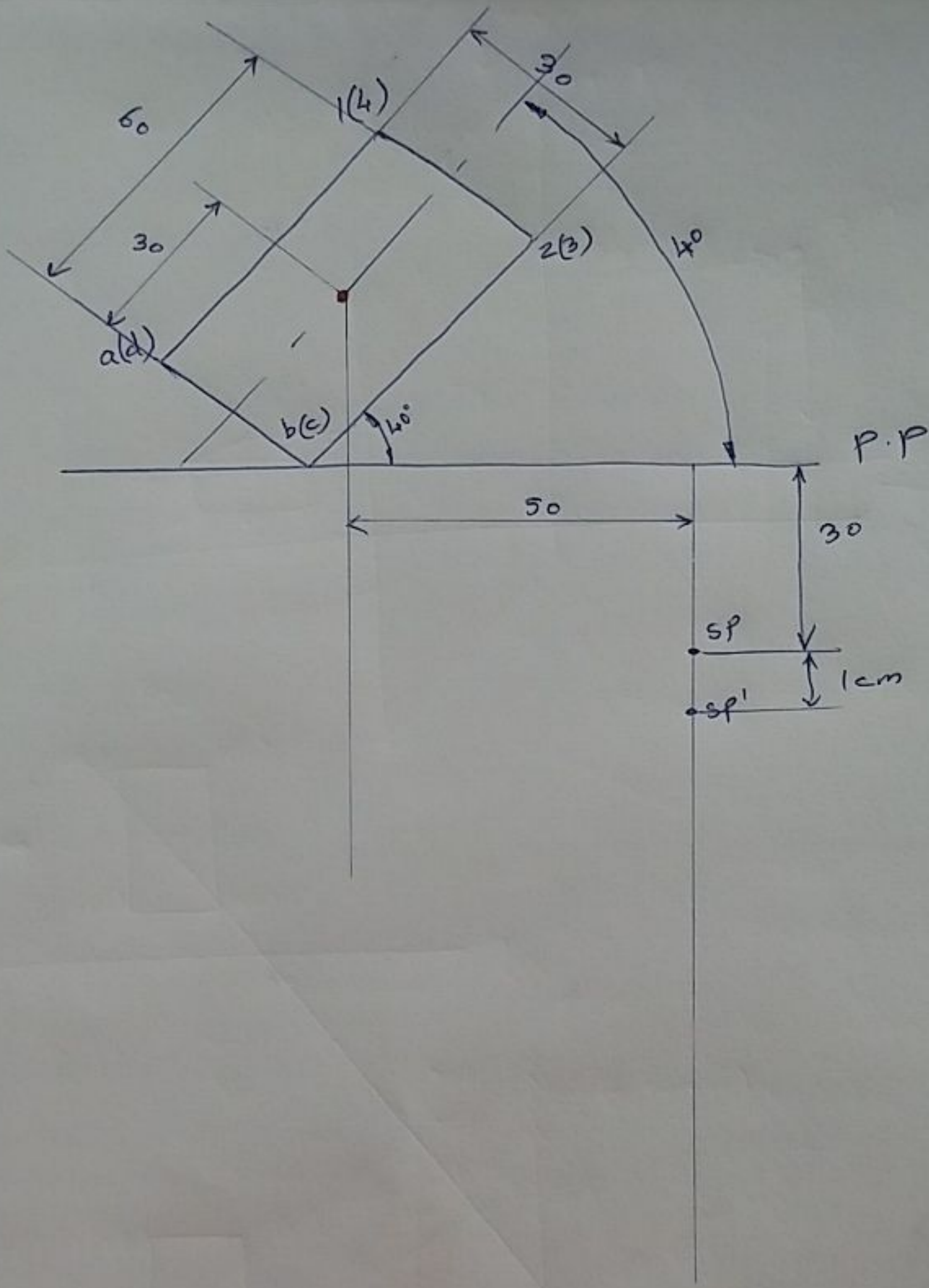


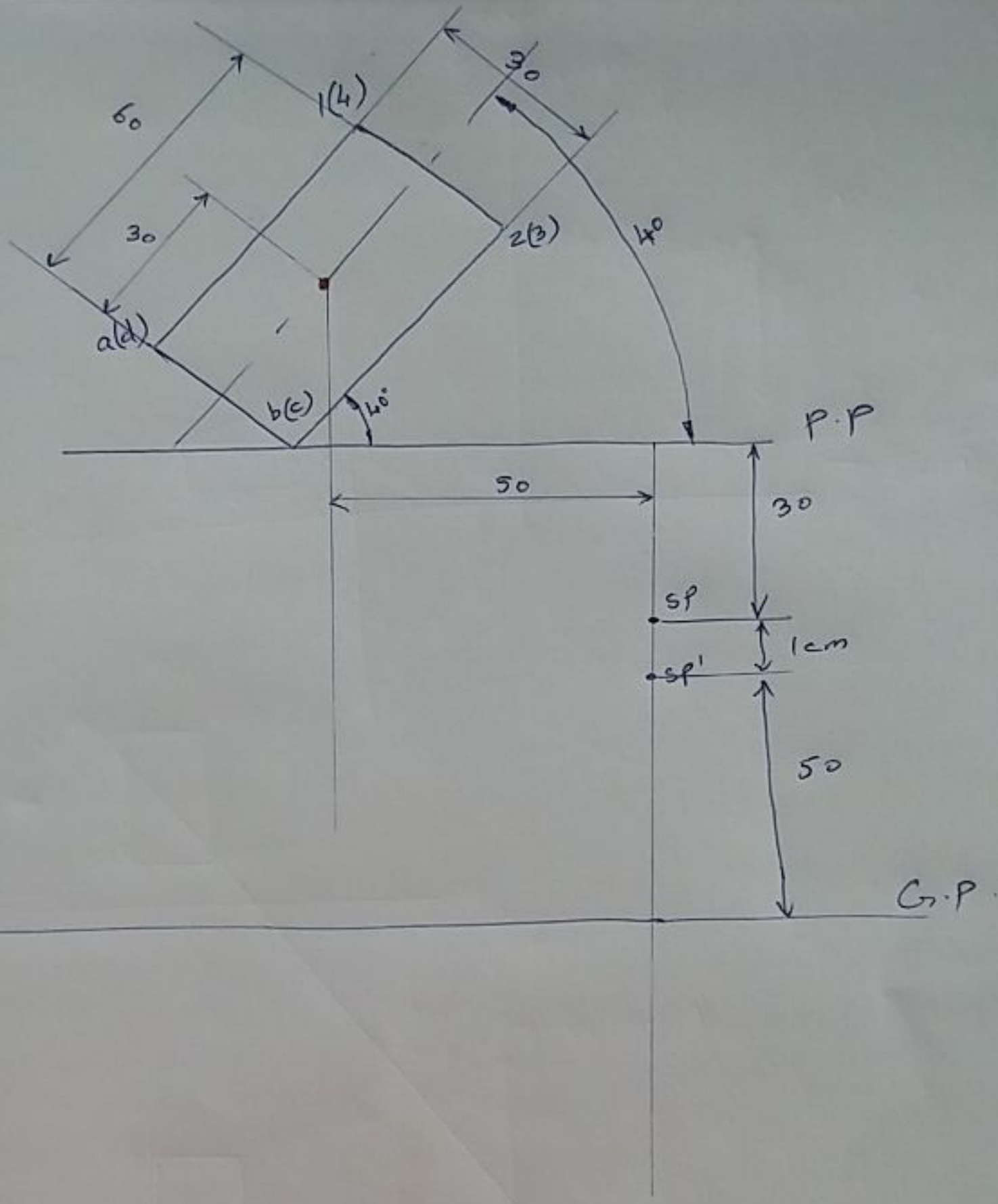
Fig (15.27) Pictorial view of the prism and SP

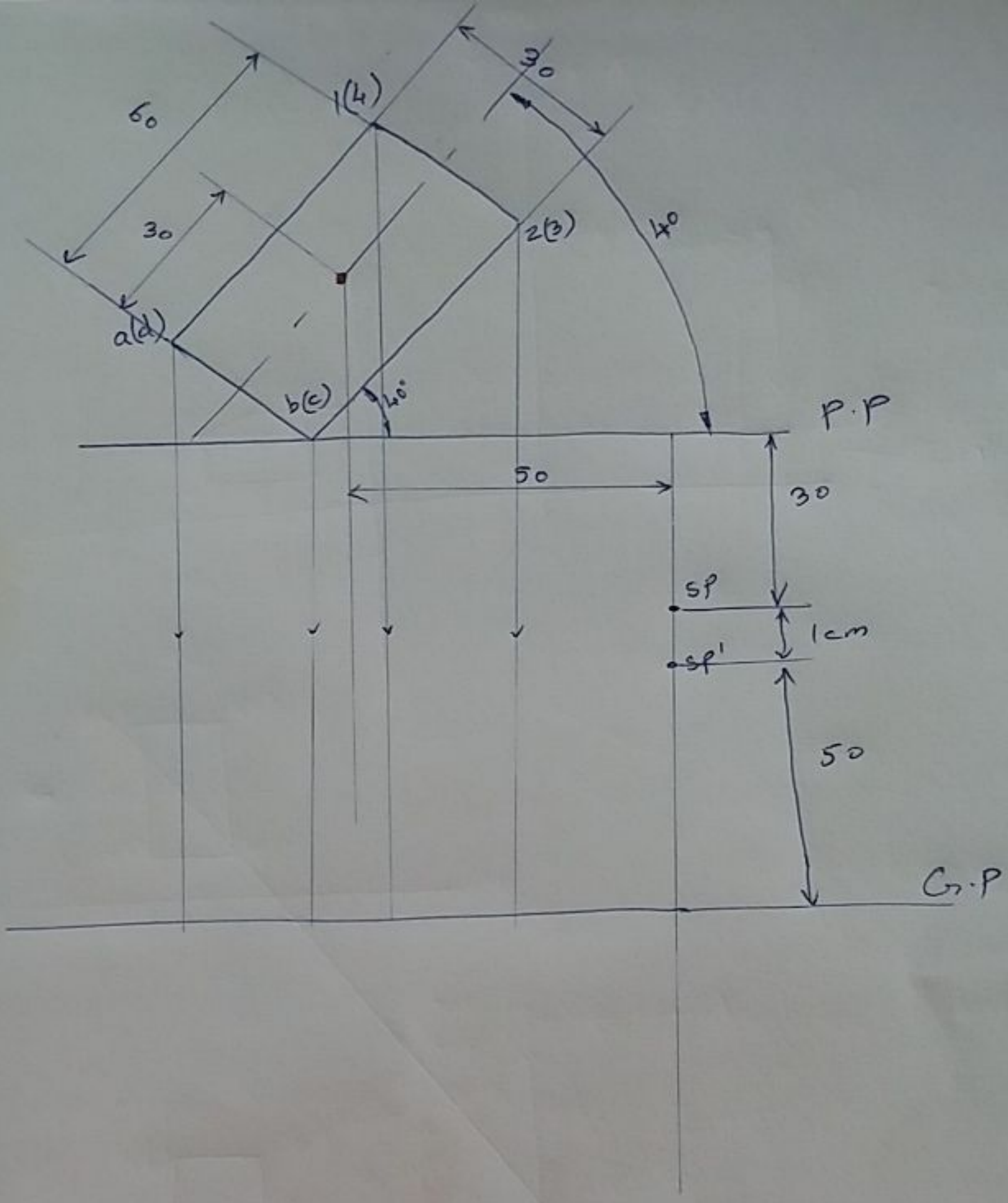

T.V
30
50
40°
5°
F.V
2
1
B
A
3
4
60
D
30
C

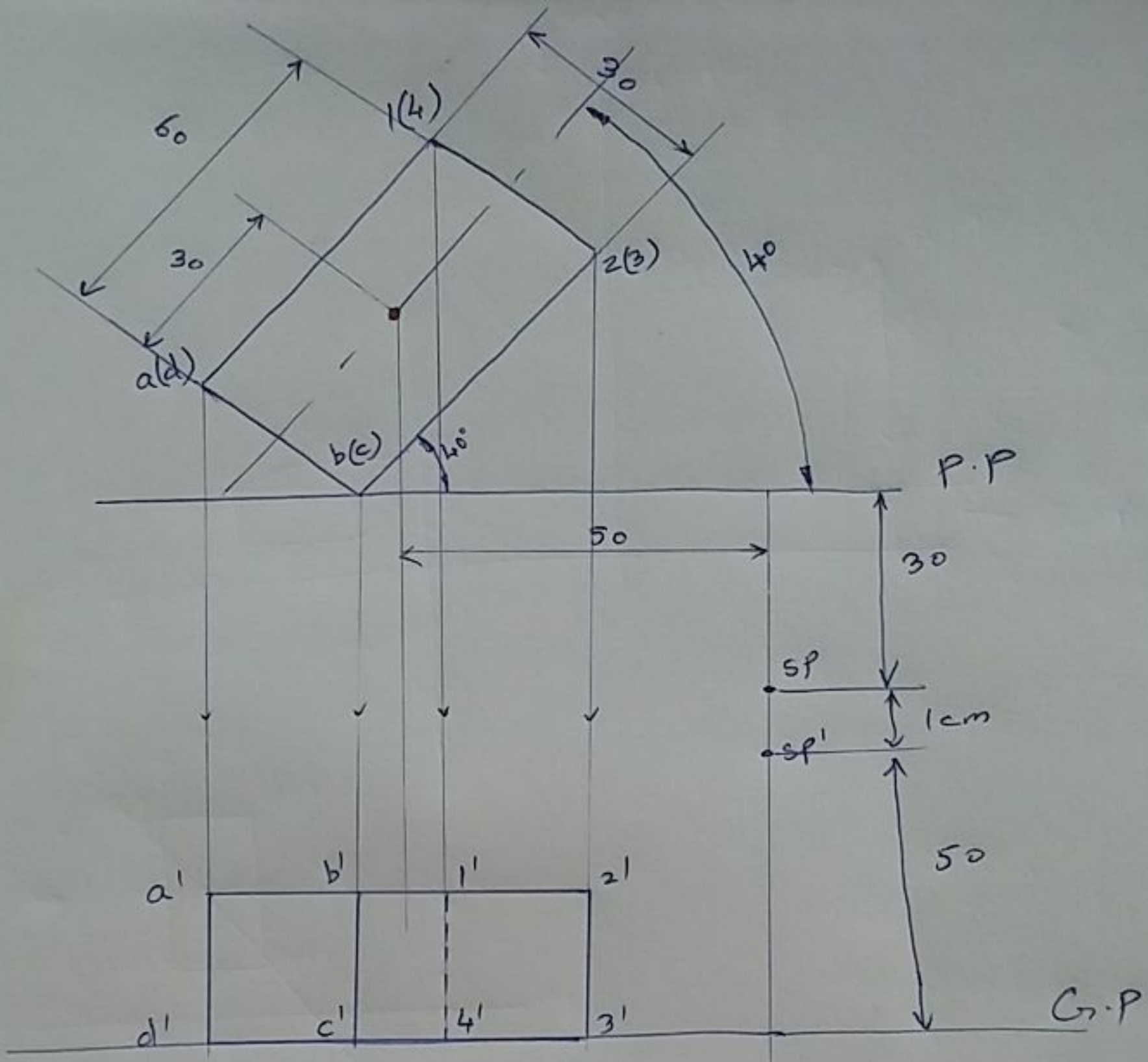

1(4)
2(3)
40
a(d)
b(c)
40°
P.P

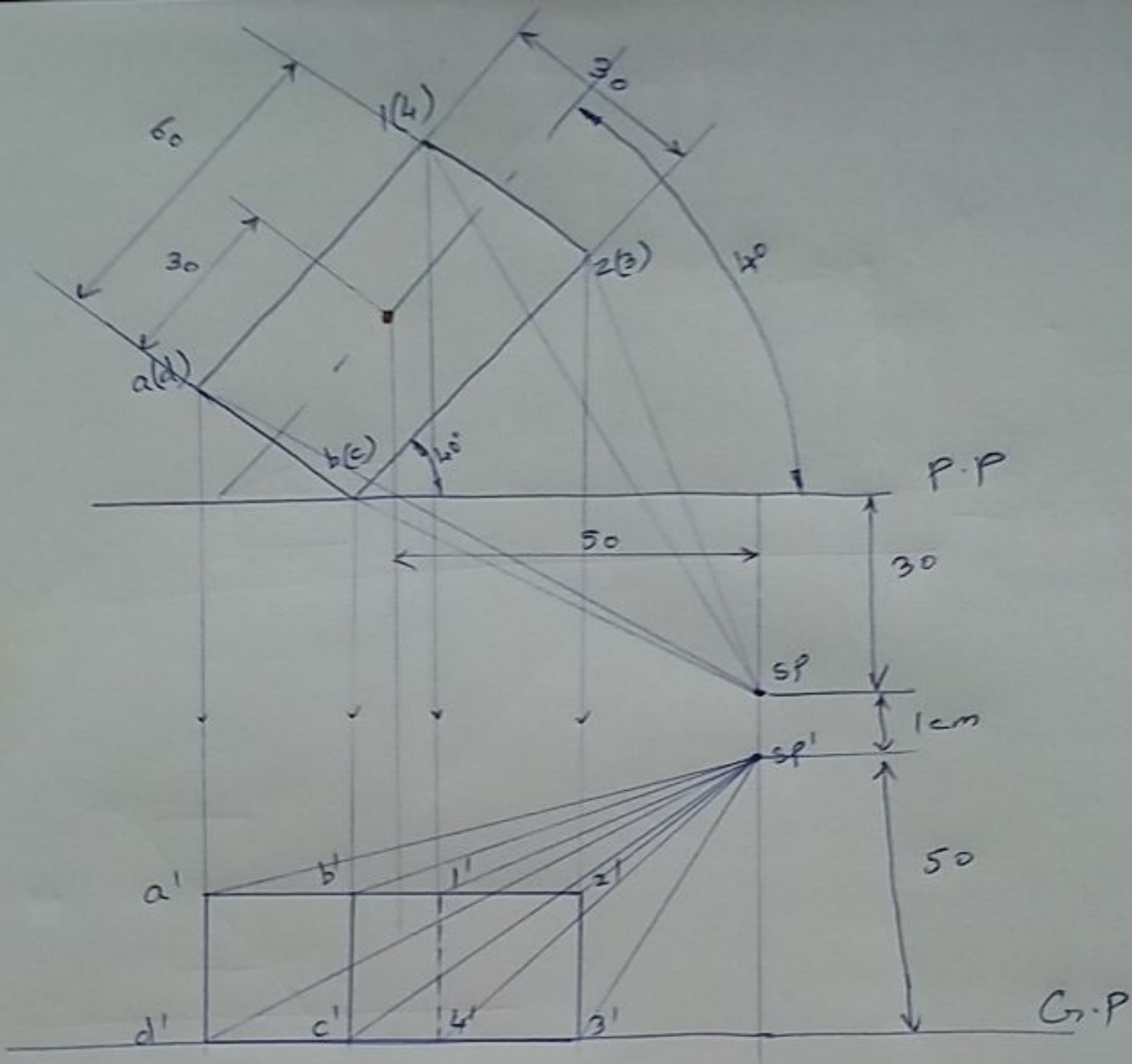

60
30
1(4)
30
2(3)
40
a(d)
b(c)
40°
50

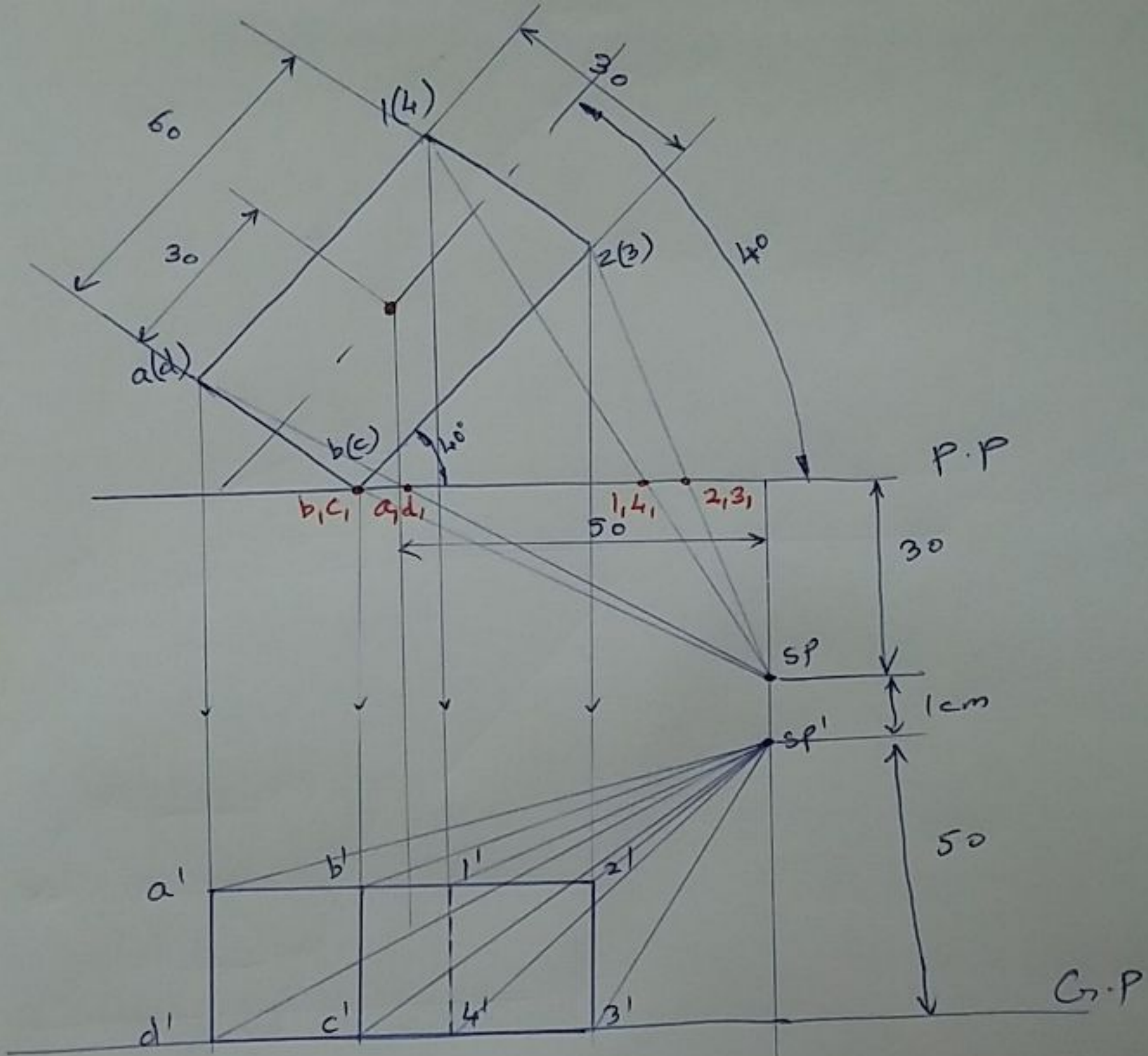

60
30
1(4)
30
2(3)
40
a(d)
b(c)
40°
P.P
50
30
sp
1cm
sp'

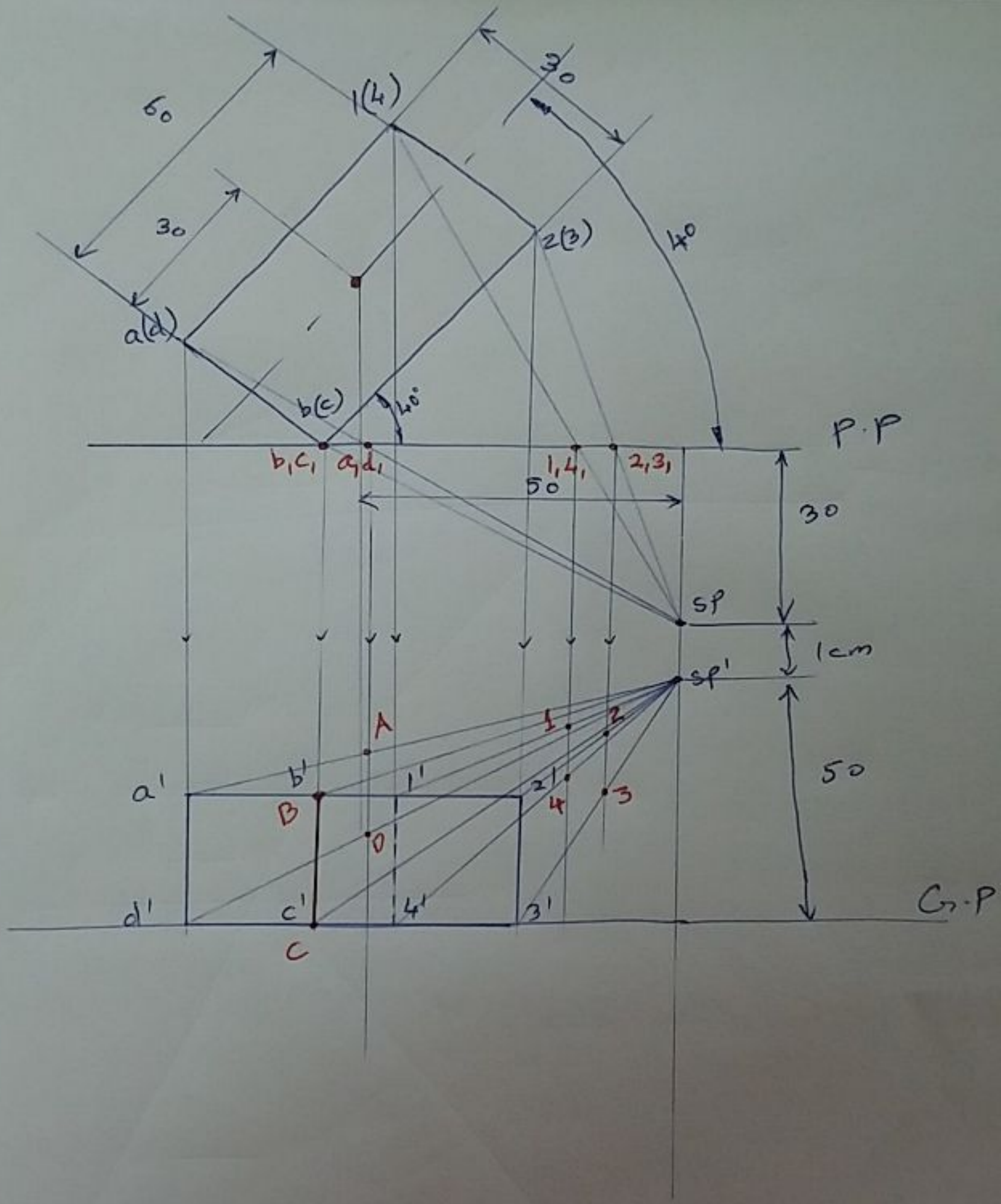

60
30
1(4)
2(3)
a(d)
b(c)
40°
40°
30
P.P
50
30
SP
1cm
SP'
50
G.P

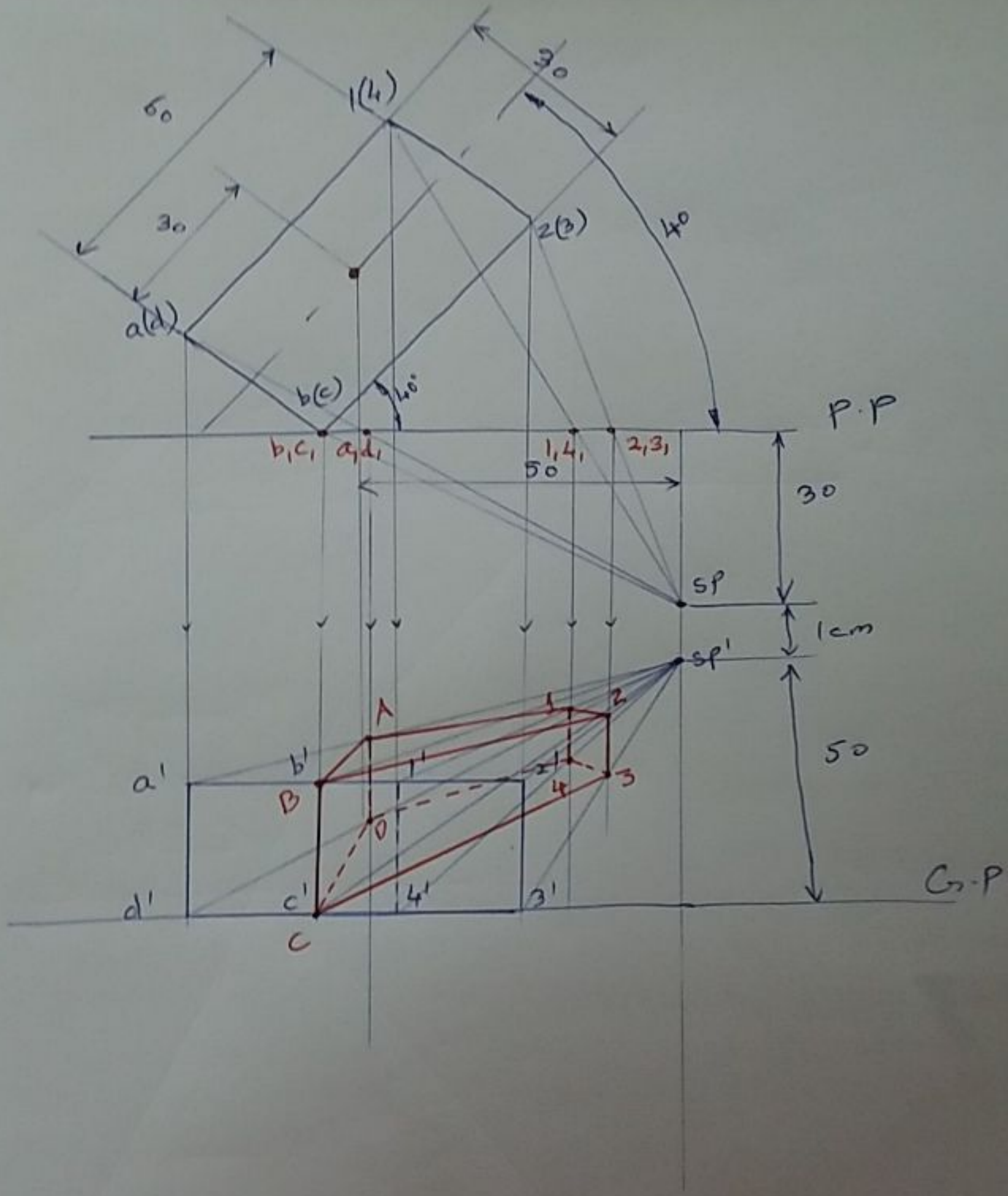

60
30
1(4)
30
2(3)
40
a(d)
b(c)
40°
P.P
50
30
SP
1cm
SP'
50
G.P


60
30
1(4)
30
2(3)
40
a(d)
b(c)
40°
P.P
50
30
sp
1cm
sp'
50
a'
b'
1'
2'
d'
c'
4'
3'
G.P

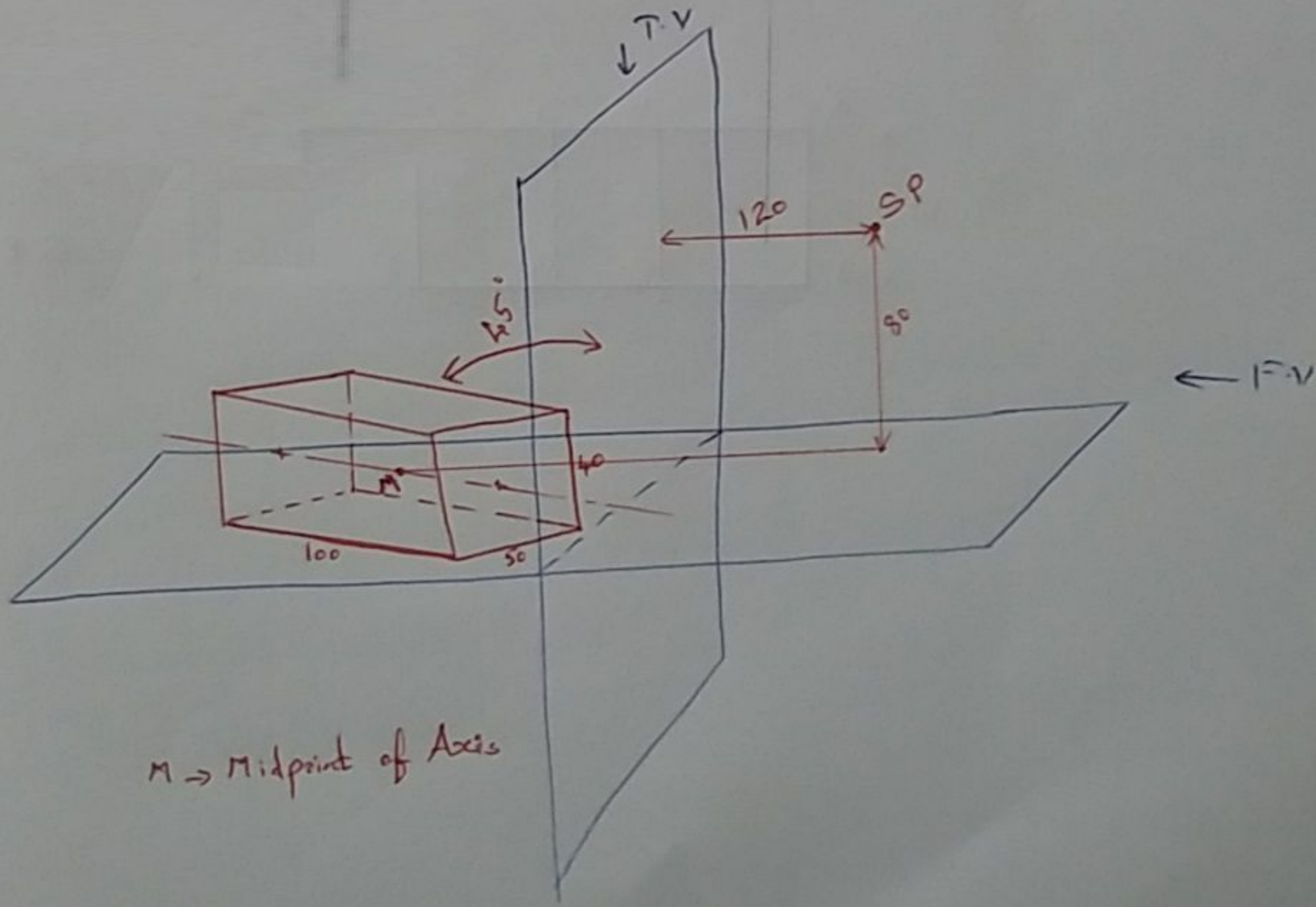

60
30
1(4)
2(3)
30
45°
a(d)
b(c)
45°
P.P
50
30
SP
1cm
SP'
50
a'
b'
1'
2'
d'
c'
4'
3'
G.P


60
30
1(4)
30
2(3)
40
a(d)
b(c)
40°
P.P
b,c,
a,d,
1,4,
2,3,
50
30
SP
1cm
SP'
50
a'
b'
1'
2'
d'
c'
4'
3'
G.P

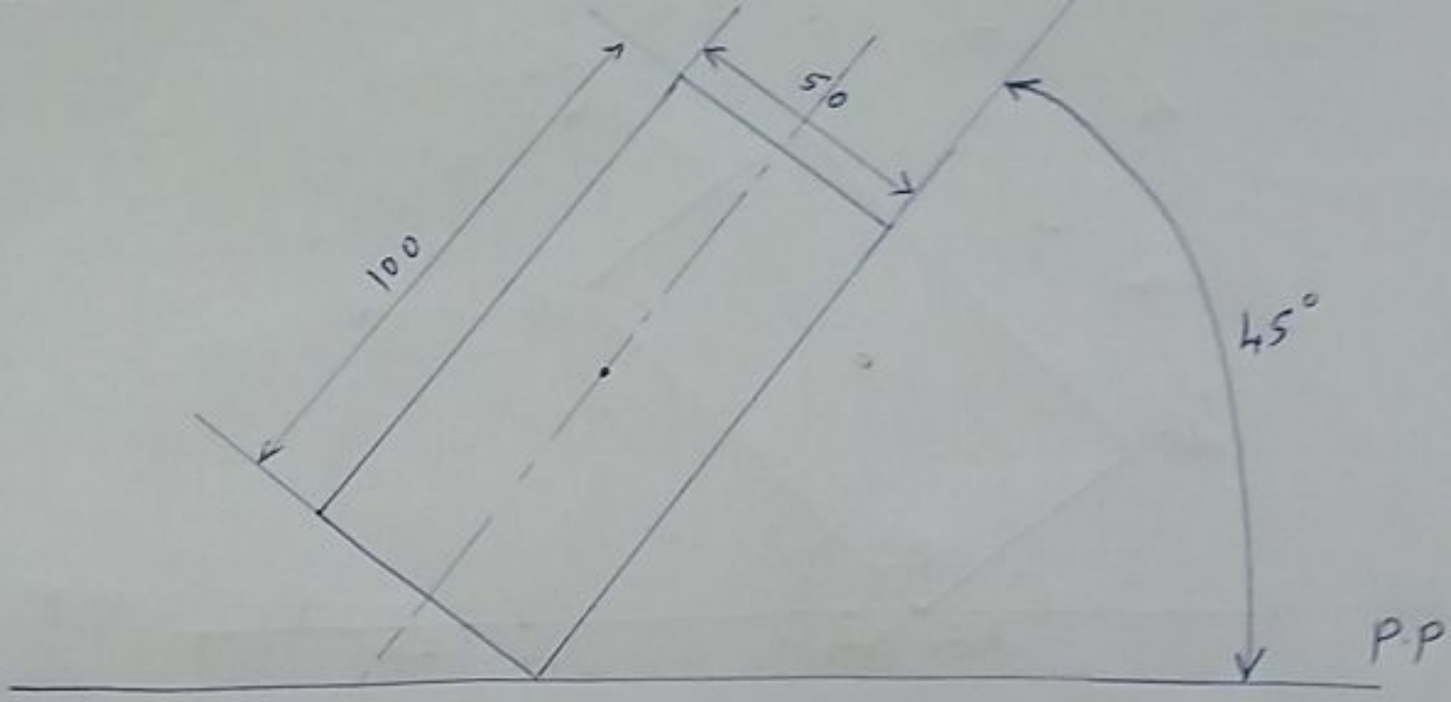

60
30
1(4)
30
40
2(3)
a(d)
b(c)
40°
P.P
b,c,
a,d,
1,4,
2,3,
50
30
SP
1cm
SP'
A
1
2
a'
b'
1'
2'
B
4
3
D
d'
c'
4'
3'
C
50
G.P

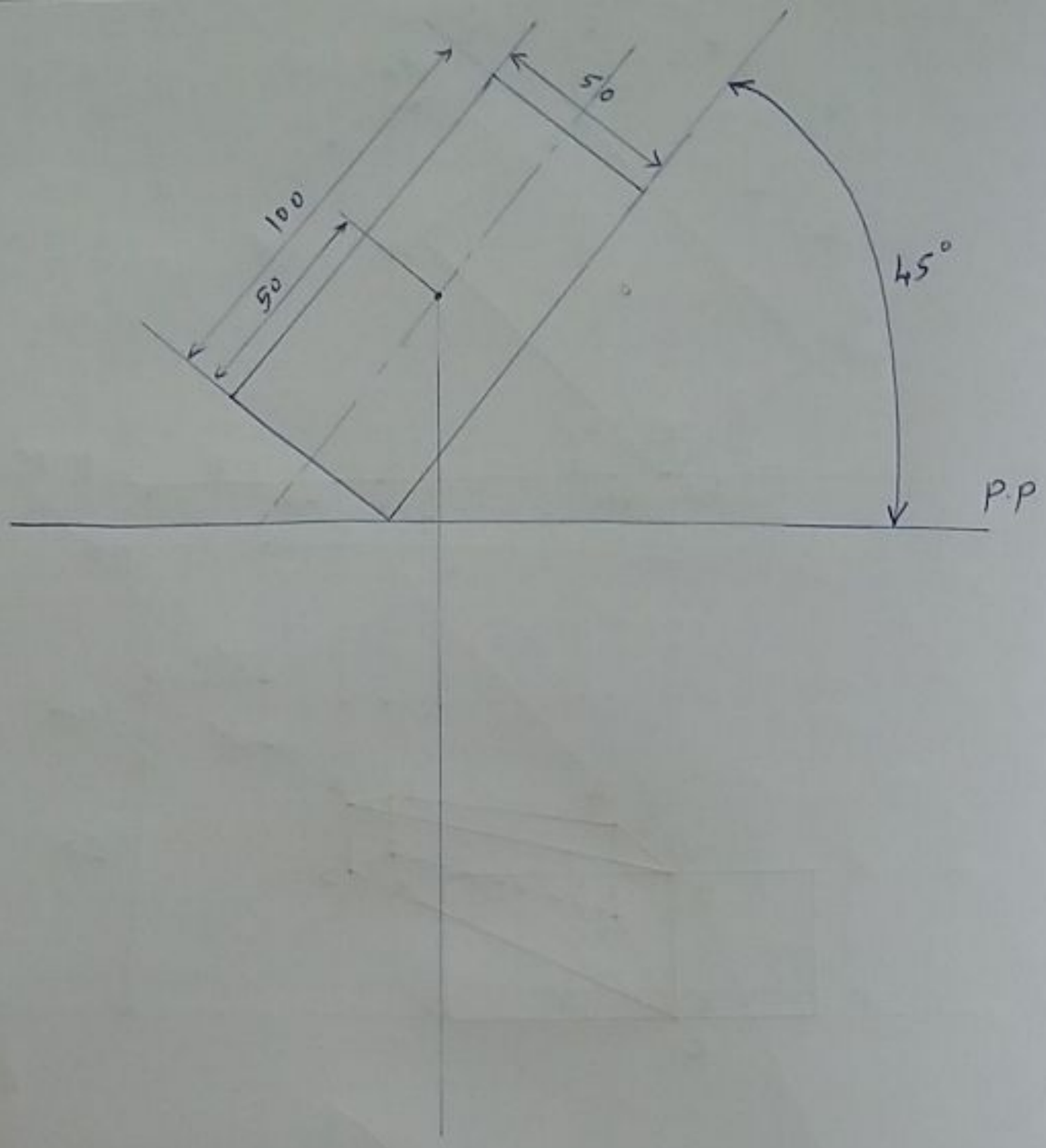

60
30
1(4)
30
40
2(3)
a(d)
b(c)
40°
P.P
b,c,
a,d,
1,4,
2,3,
50
30
SP
1cm
SP'
50
A
1
2
a'
b'
1'
x
B
3
4
D
d'
c'
4'
3'
G.P
C

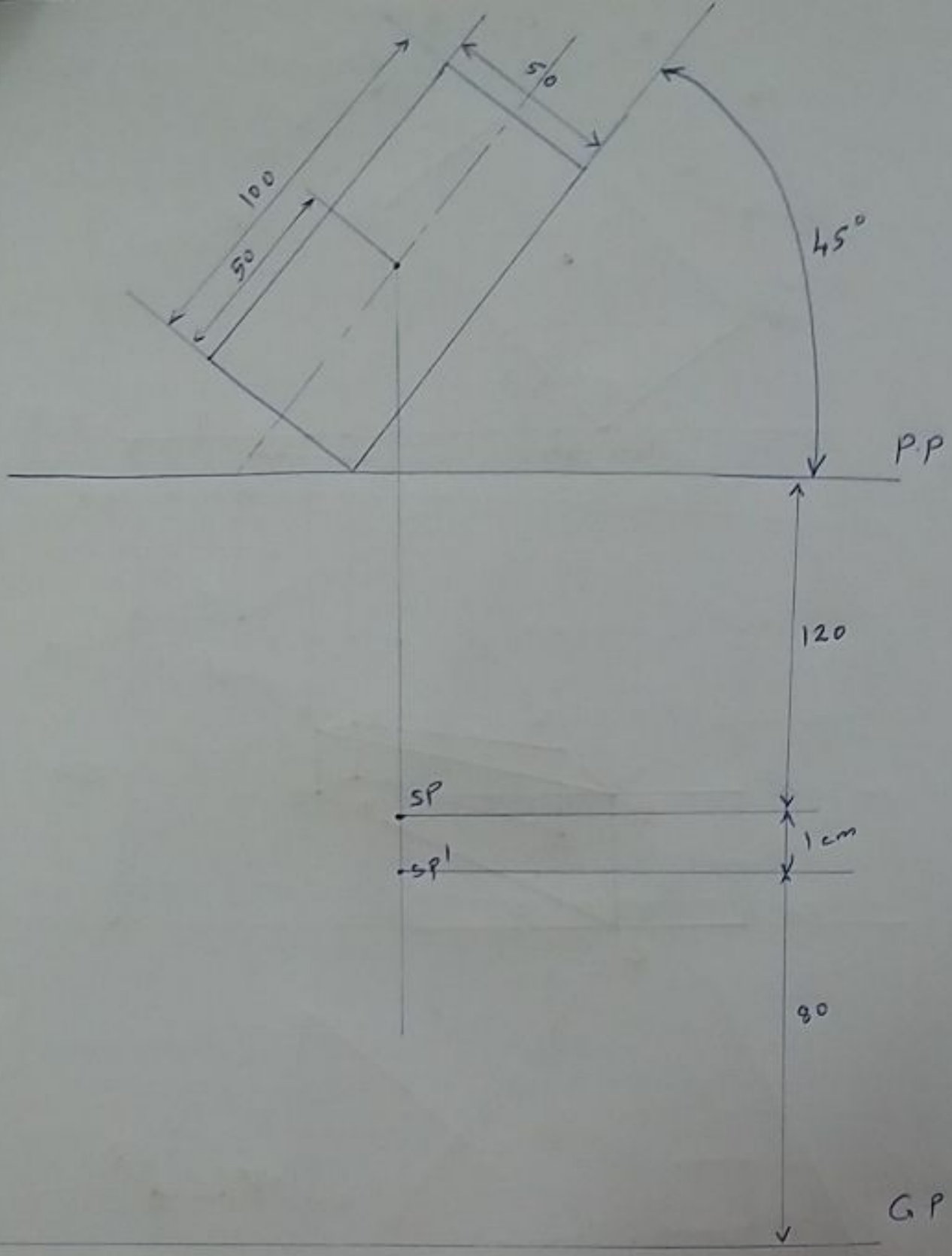
Draw the perspective view of a rectangular prism of 100 mm x 50 mm x 40 mm size lying on its 100 mm x 50 mm rectangular face on the ground plane, with a vertical edge touching the picture plane and the end faces inclined at 45^0 with the picture plane. The station point is 120 mm in front of the picture plane, 80 mm above the ground plane and lies in a central plane which is passing through the centre of the prism.

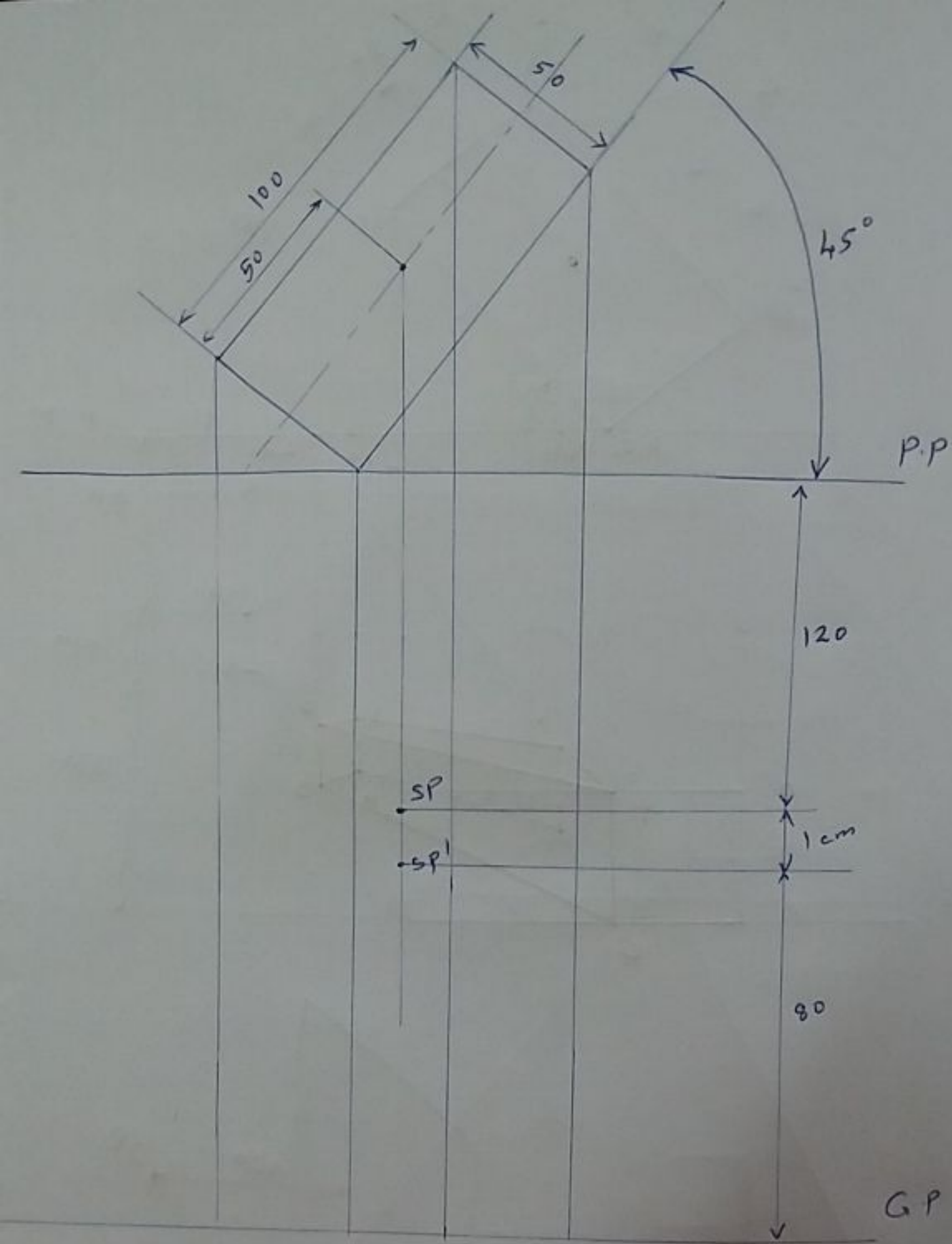


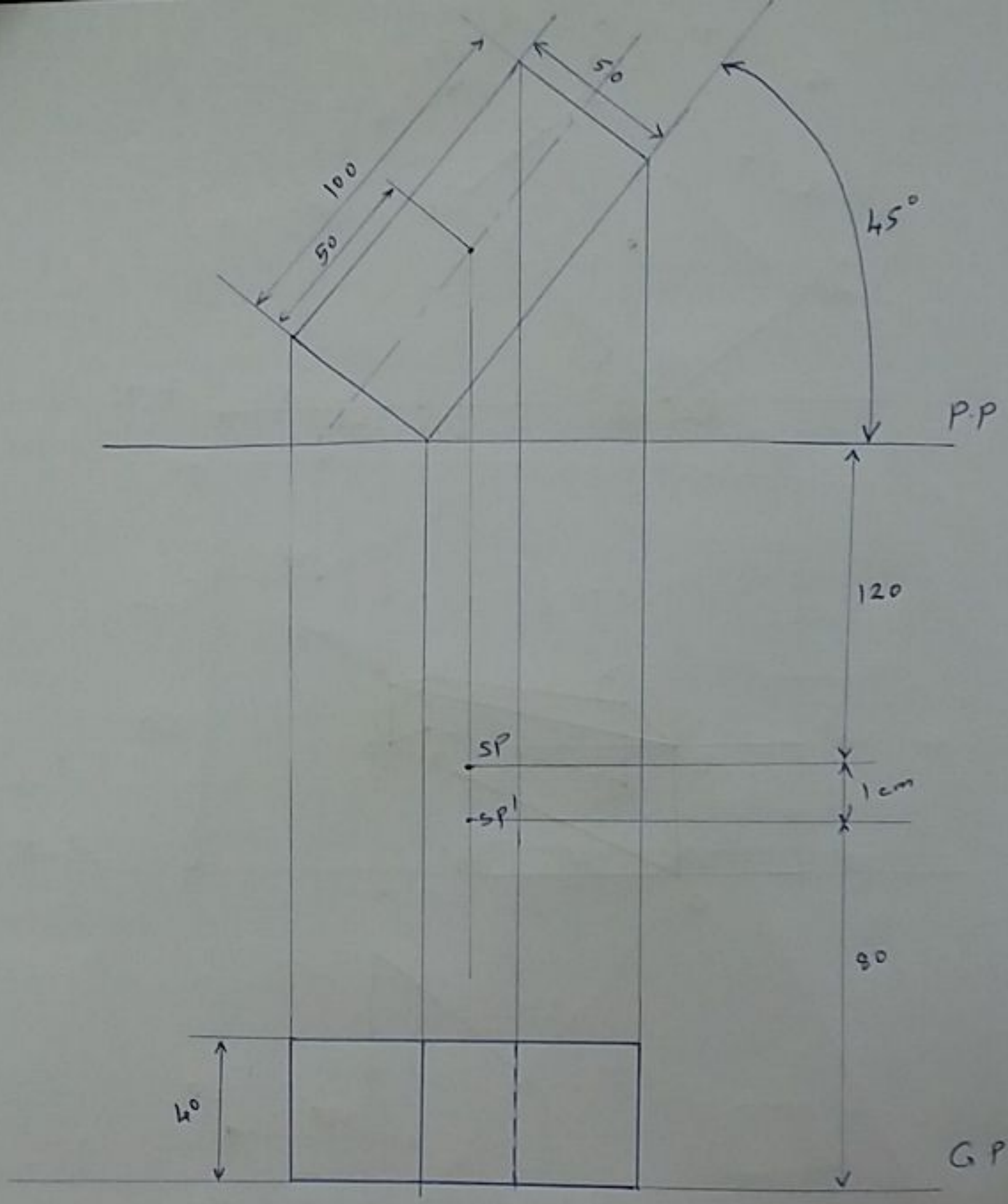
M → Midpoint of Axis

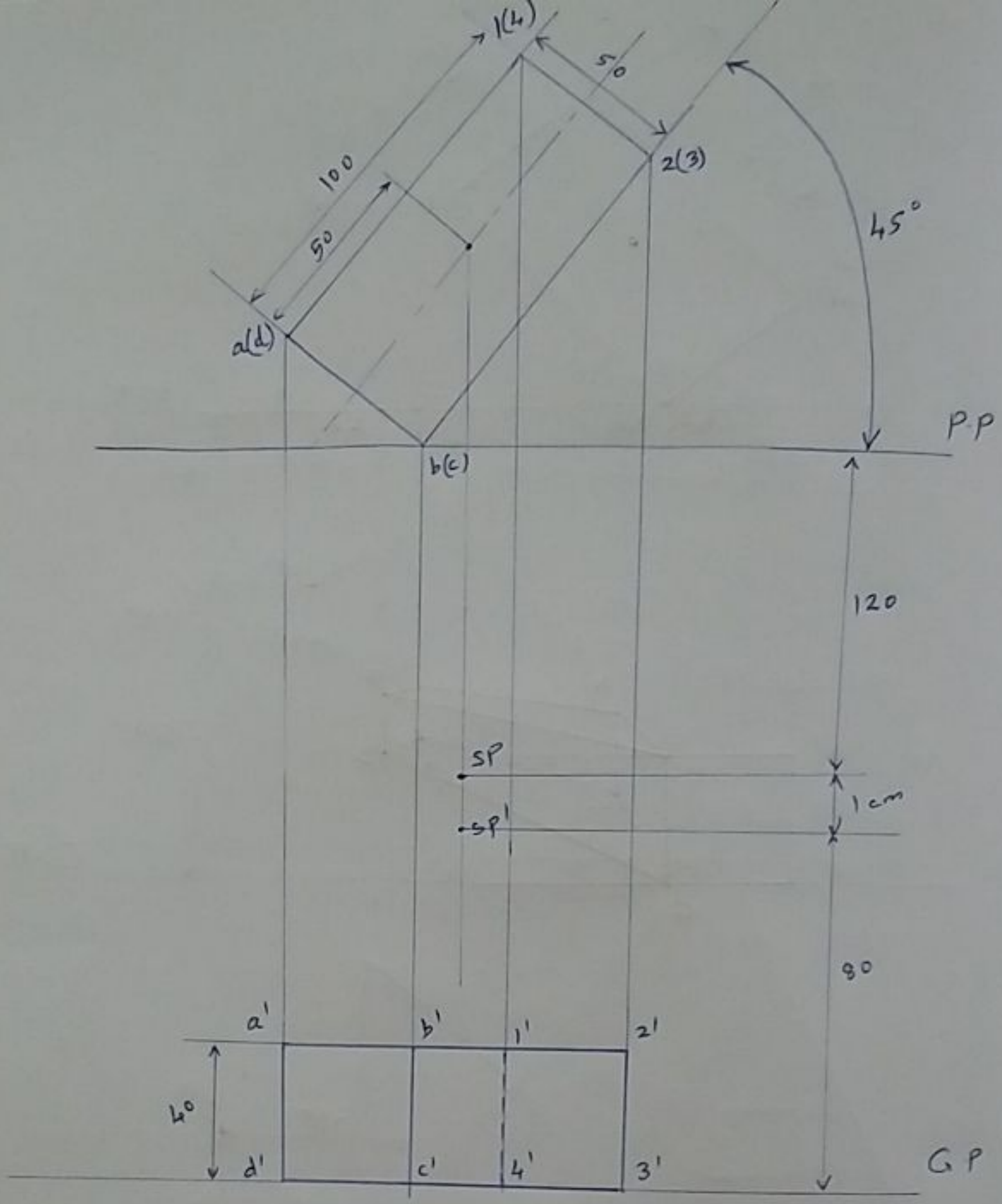

100
50
45°
P.P


100
50
50
45°
P.P


100
50
50
45°
P.P
120
SP
SP'
1 cm
80
G.P


100
50
50
45°
P.P
120
SP
SP'
1 cm
80
G.P


100
50
50
45°
P.P
120
SP
SP'
1 cm
90
40
G P


1(4)
50
100
50
2(3)
45°
a(d)
b(c)
P P
120
SP
SP'
1 cm
80
a'
b'
1'
2'
40
d'
c'
4'
3'
G P

Problem : 15.11 *A square prism of base edge 30 mm and height 60 mm is resting on a face with the axis inclined at 30° with PP and the centre of the nearest base in the PP, SP is 30 mm in front of the PP, 5 mm to the right of the mid point of the axis and 50 mm above GP. Draw the perspective view of the prism.*

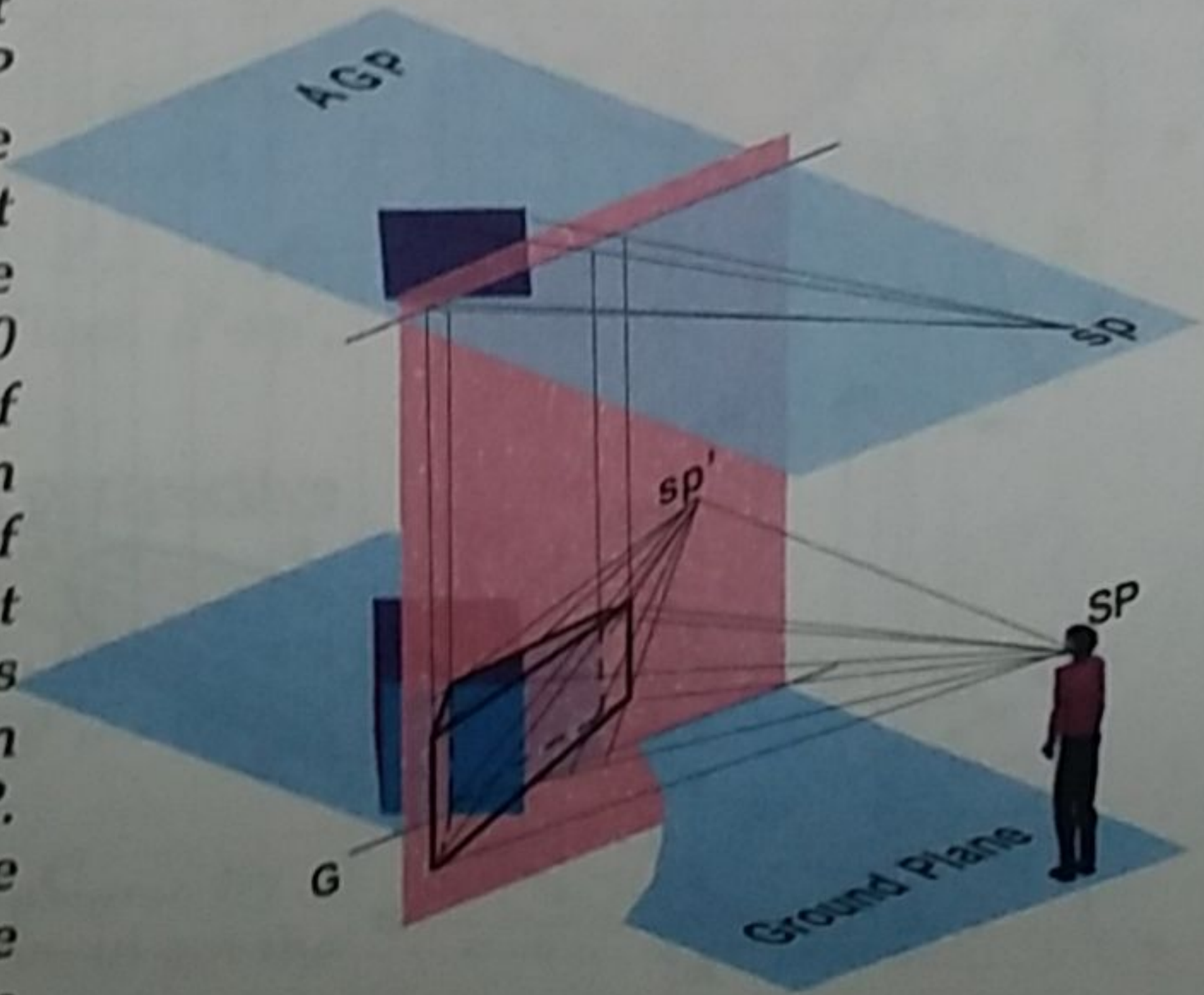
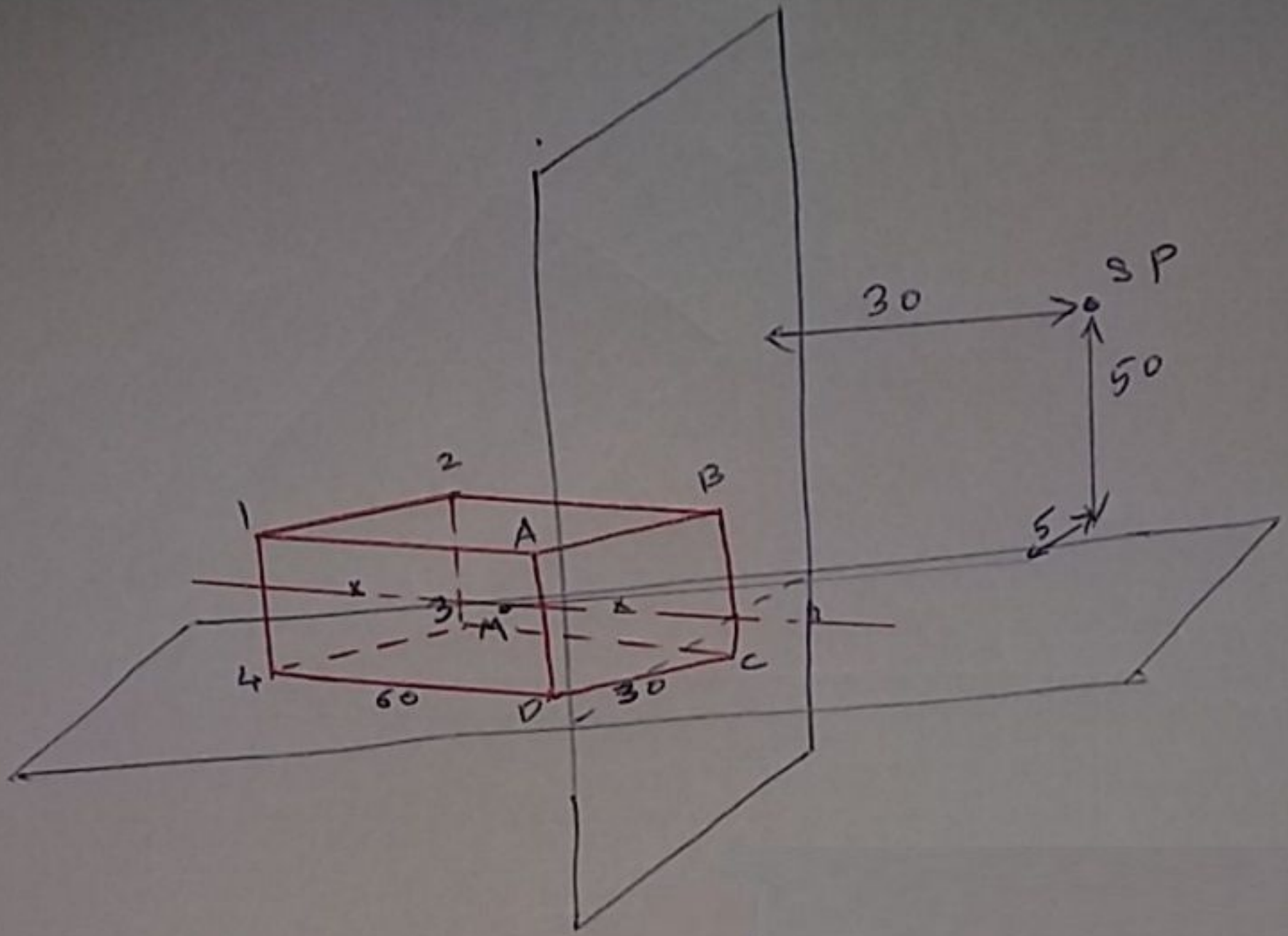
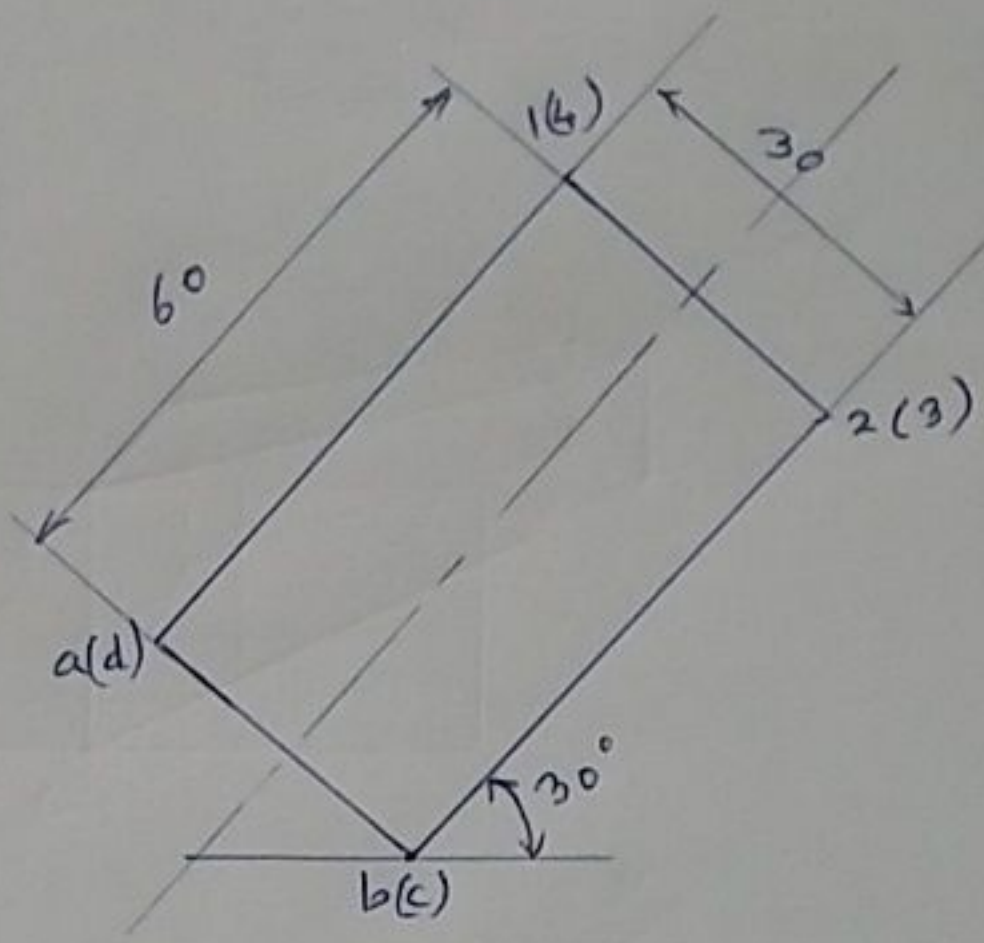
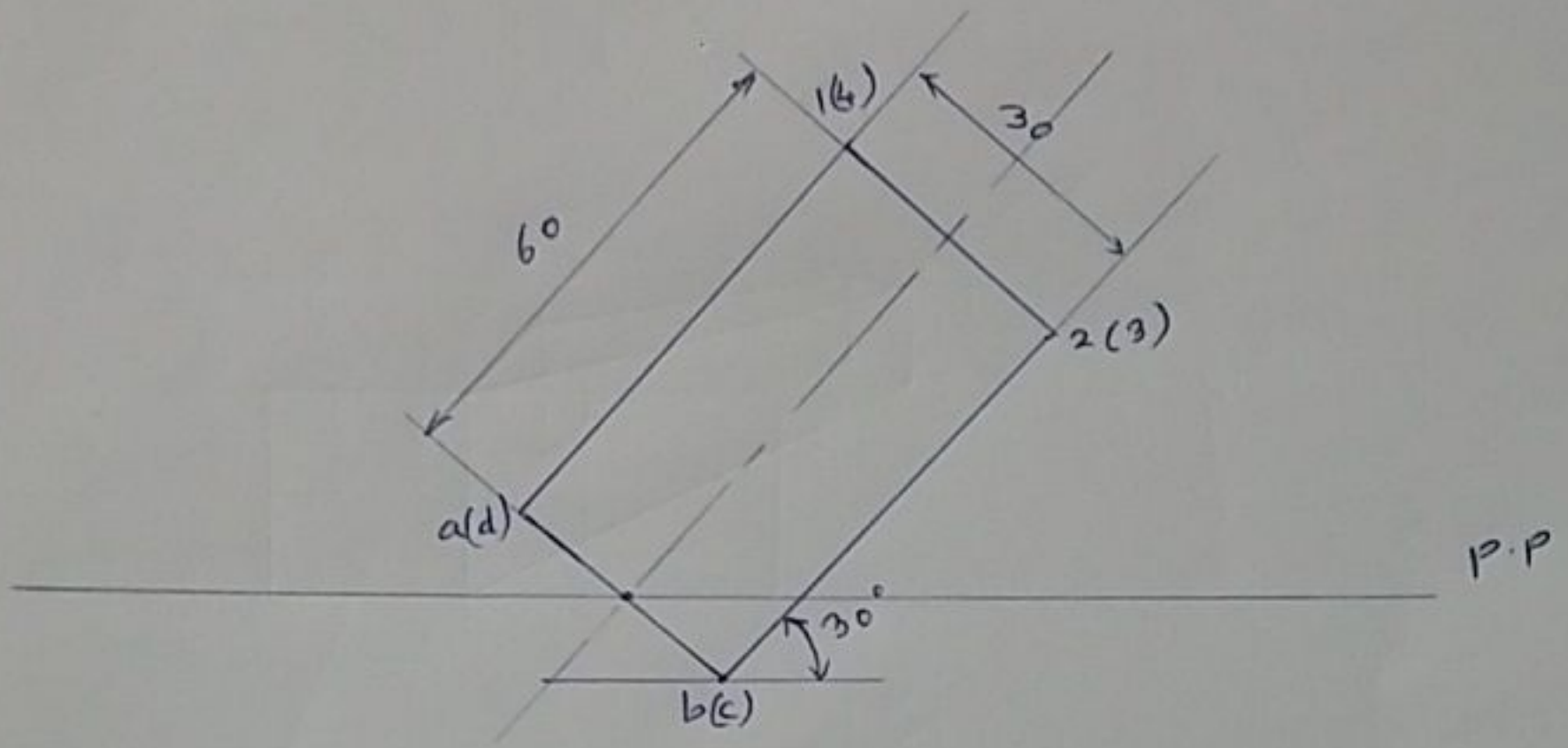
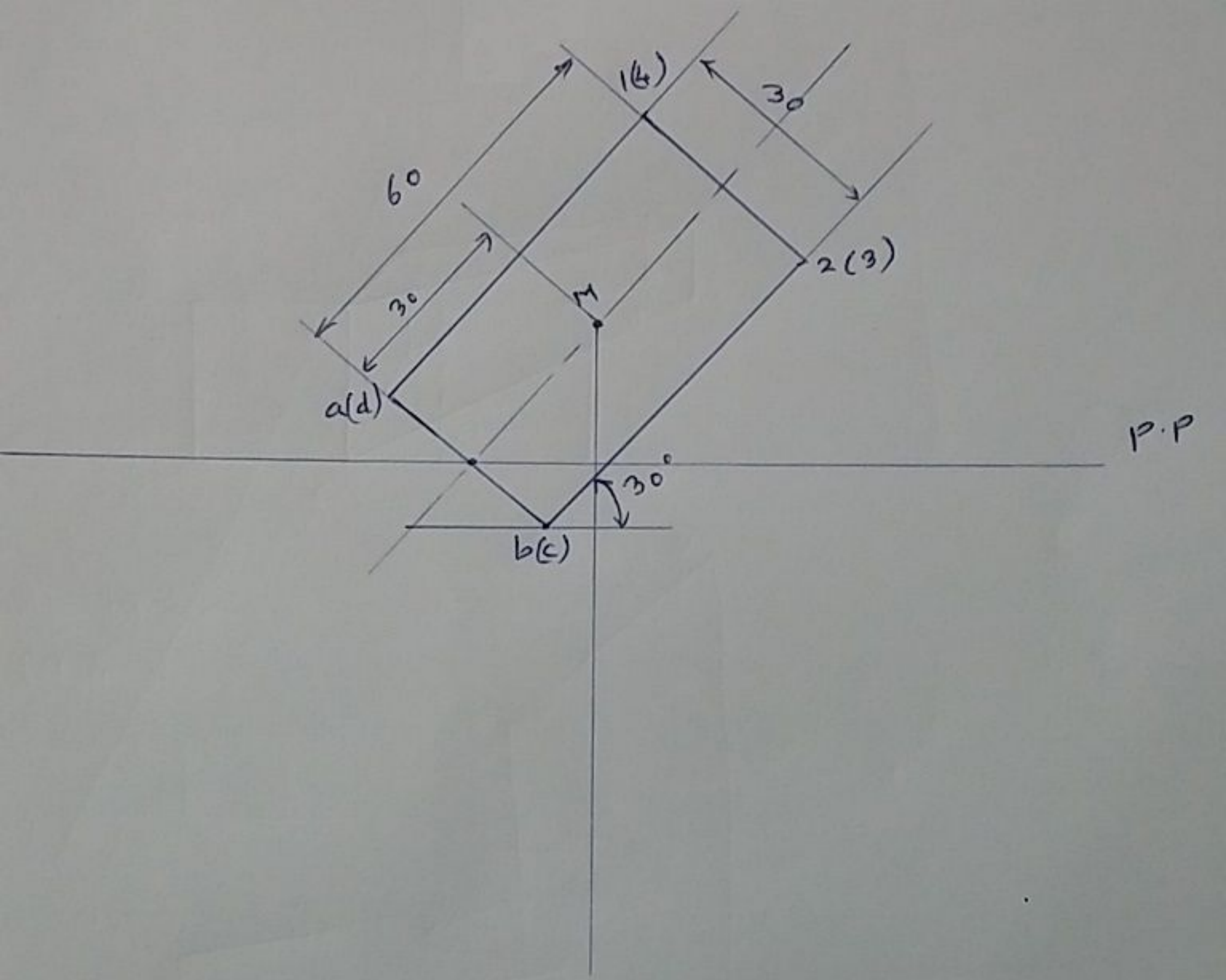


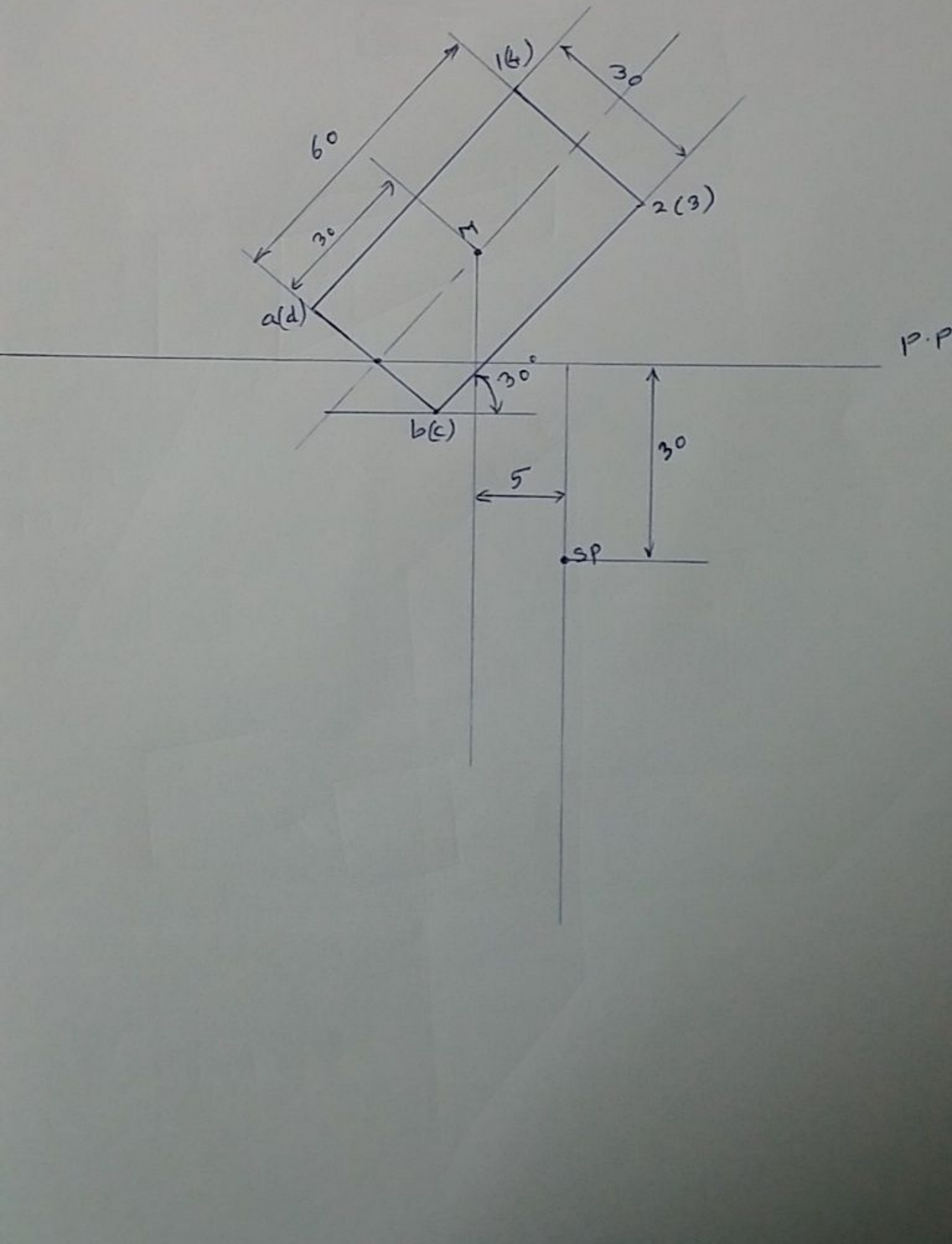
Fig (15.29) Pictorial view of the prism and SP

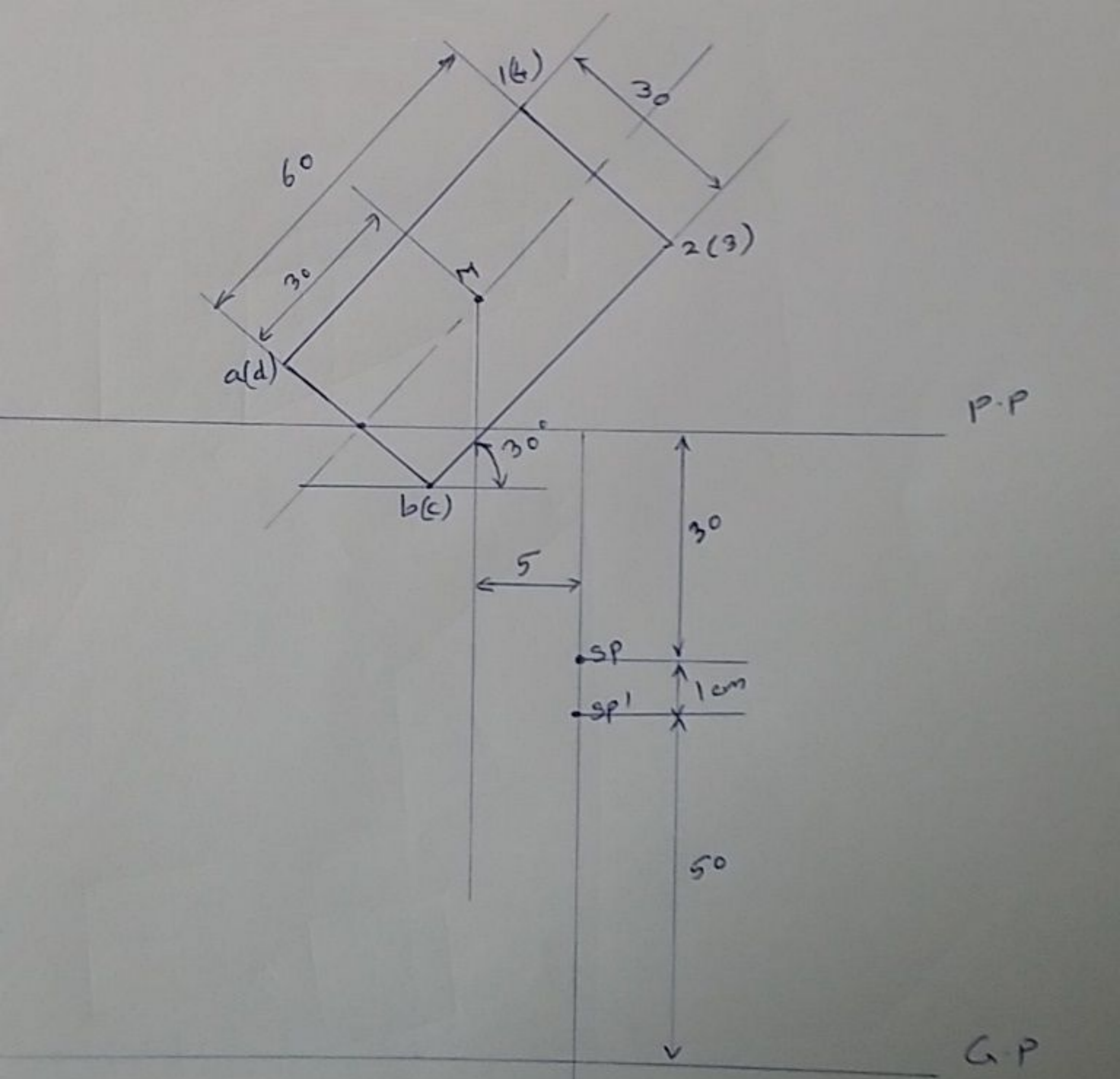

SP
30
50
5
2
B
1
A
x
3
M
4
60
D
30
C

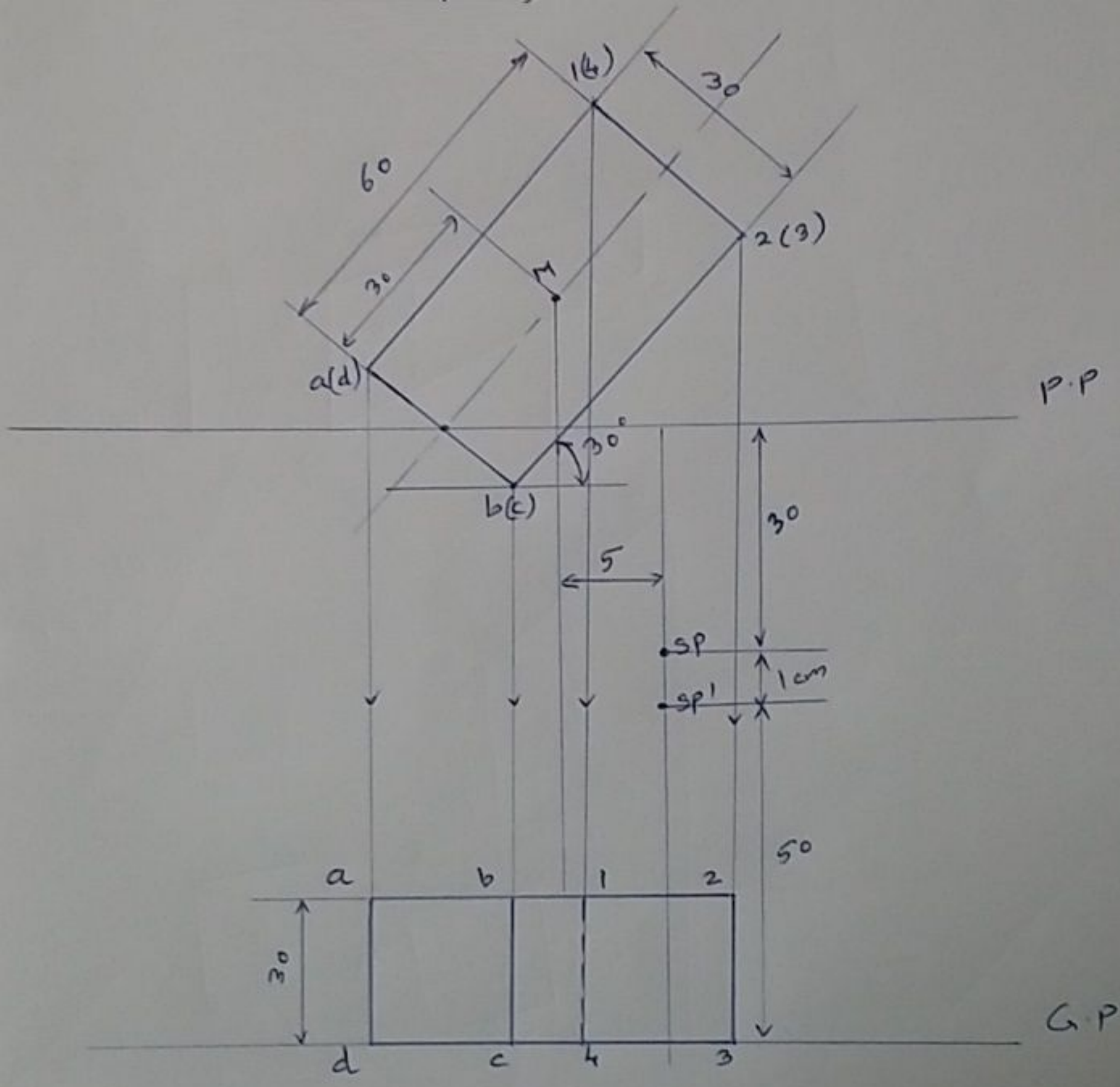

1(6)
30
60
2(3)
a(d)
30°
b(c)

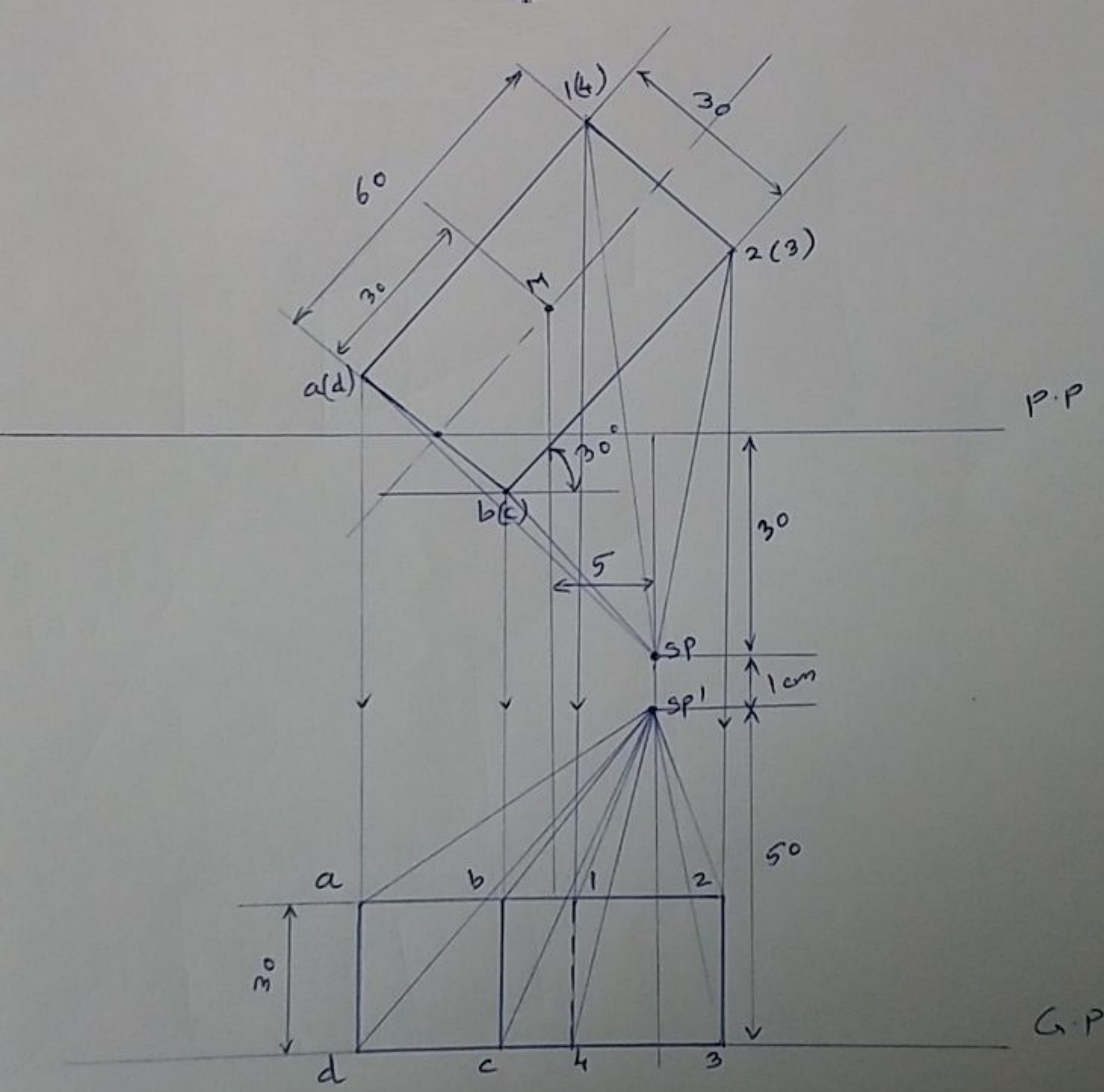

1(4)
30
60
2(3)
a(d)
P·P
30°
b(c)

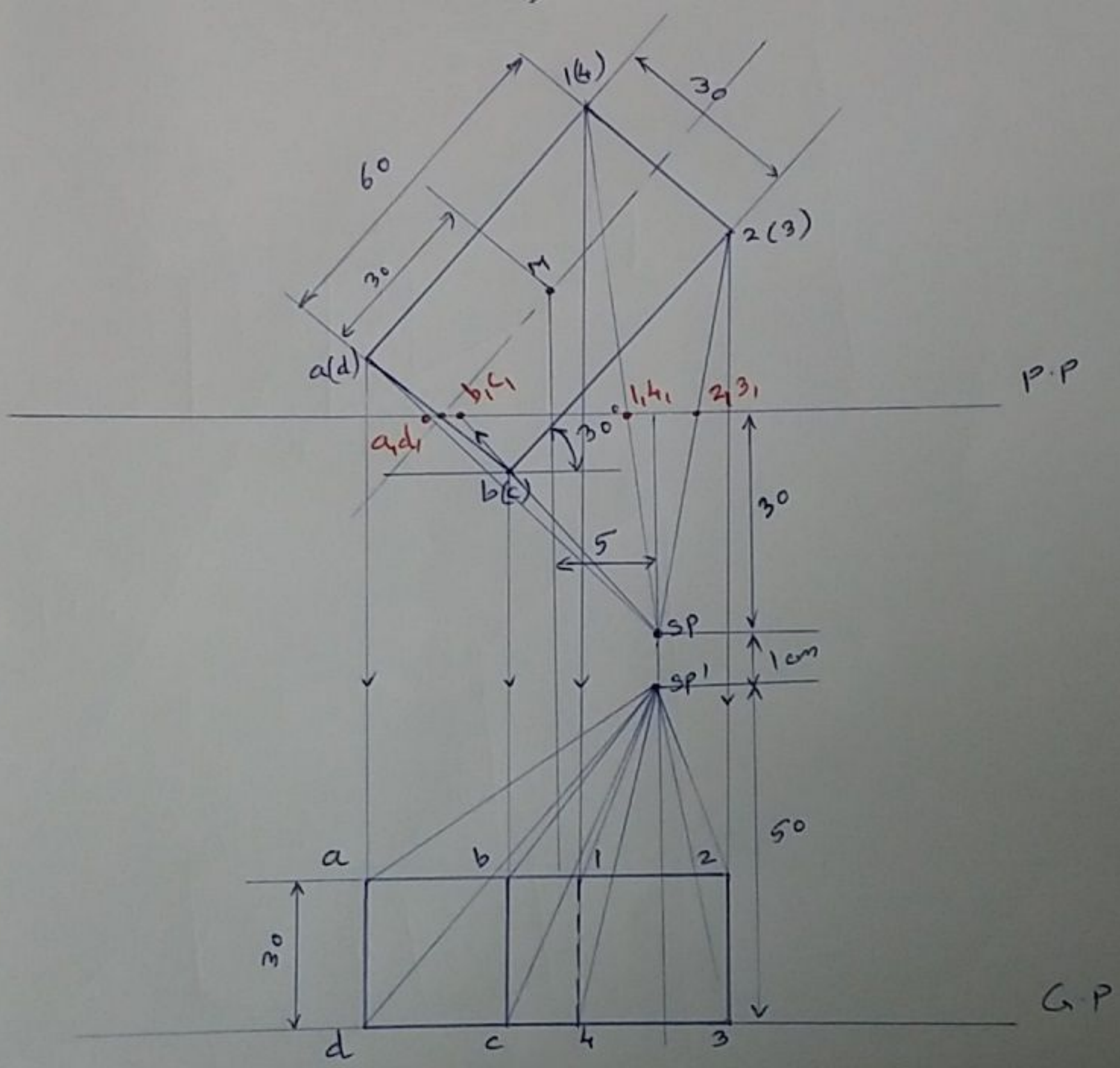

1(4)
60
30
2(3)
30
M
a(d)
P·P
30°
b(c)

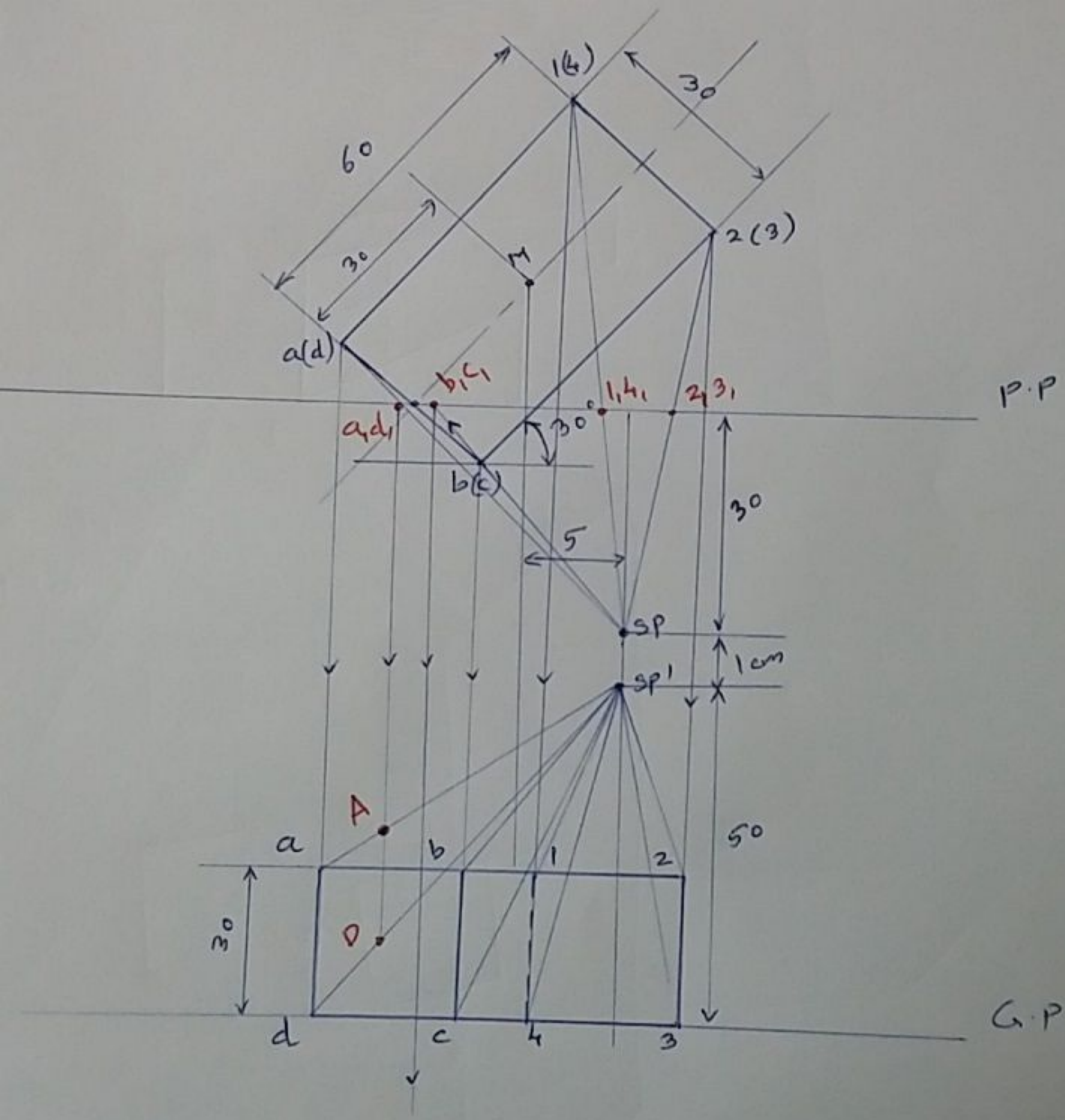

1(4)
30
60
2(3)
30
a(d)
P·P
30°
b(c)
30
5
SP

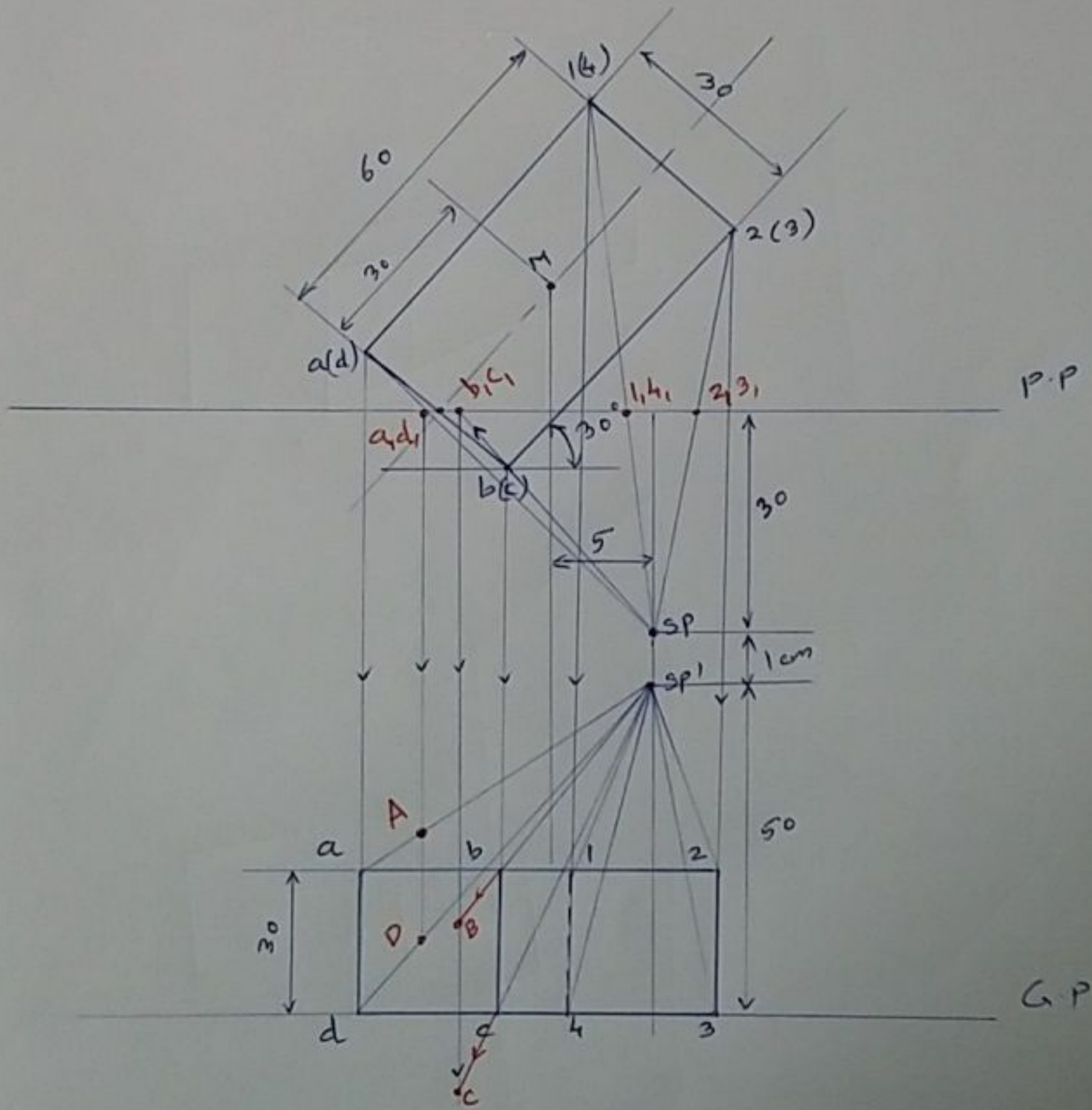

1(4)
30
60
2(3)
30
M
a(d)
P·P
30°
b(c)
30
5
sp
1 cm
sp'
50
V
G·P

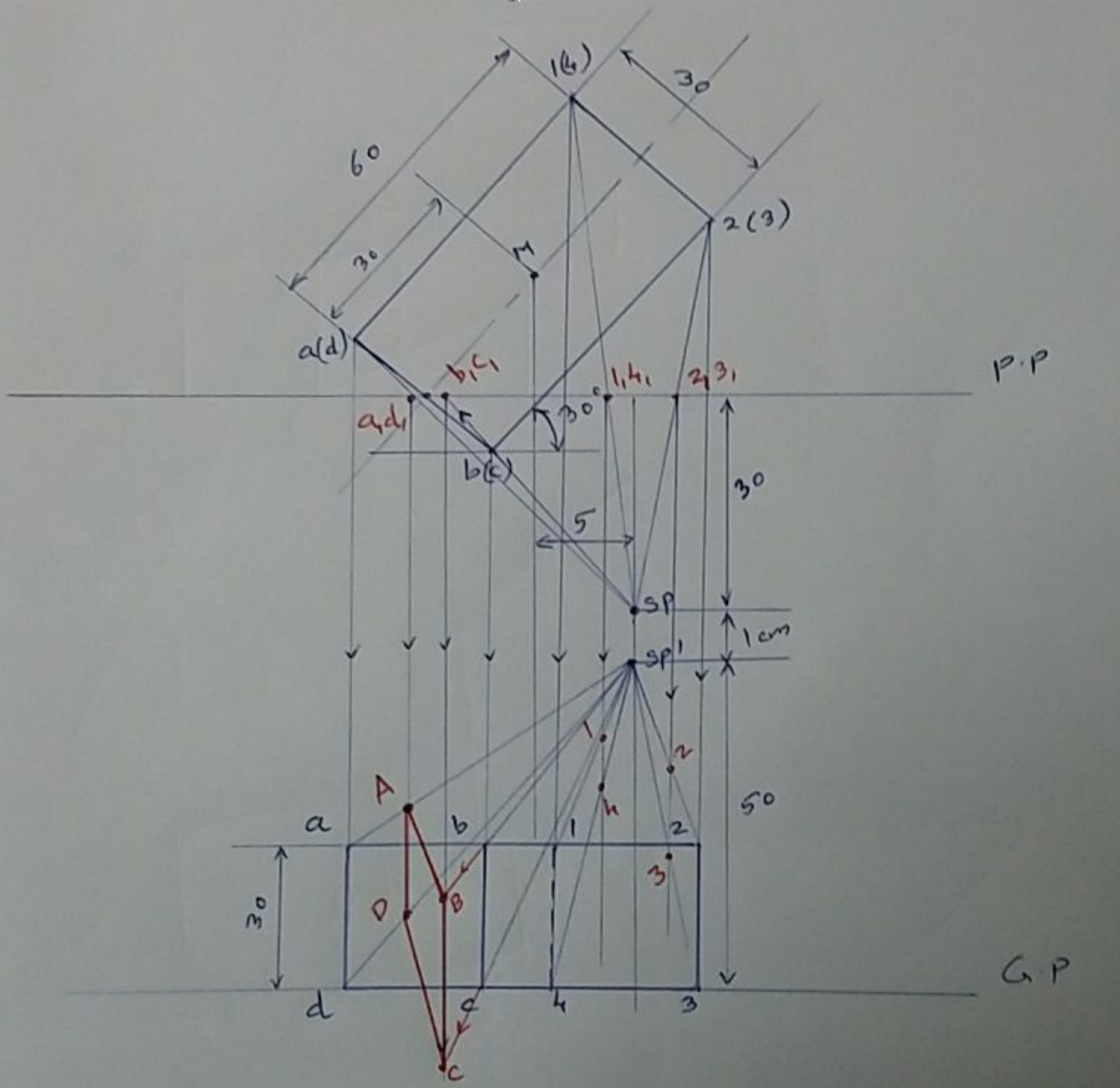

1(4)
30
60
30
2(3)
a(d)
P.P
30°
b(c)
30
5
SP
1 cm
SP1
50
a
b
1
2
30
G.P
d
c
4
3

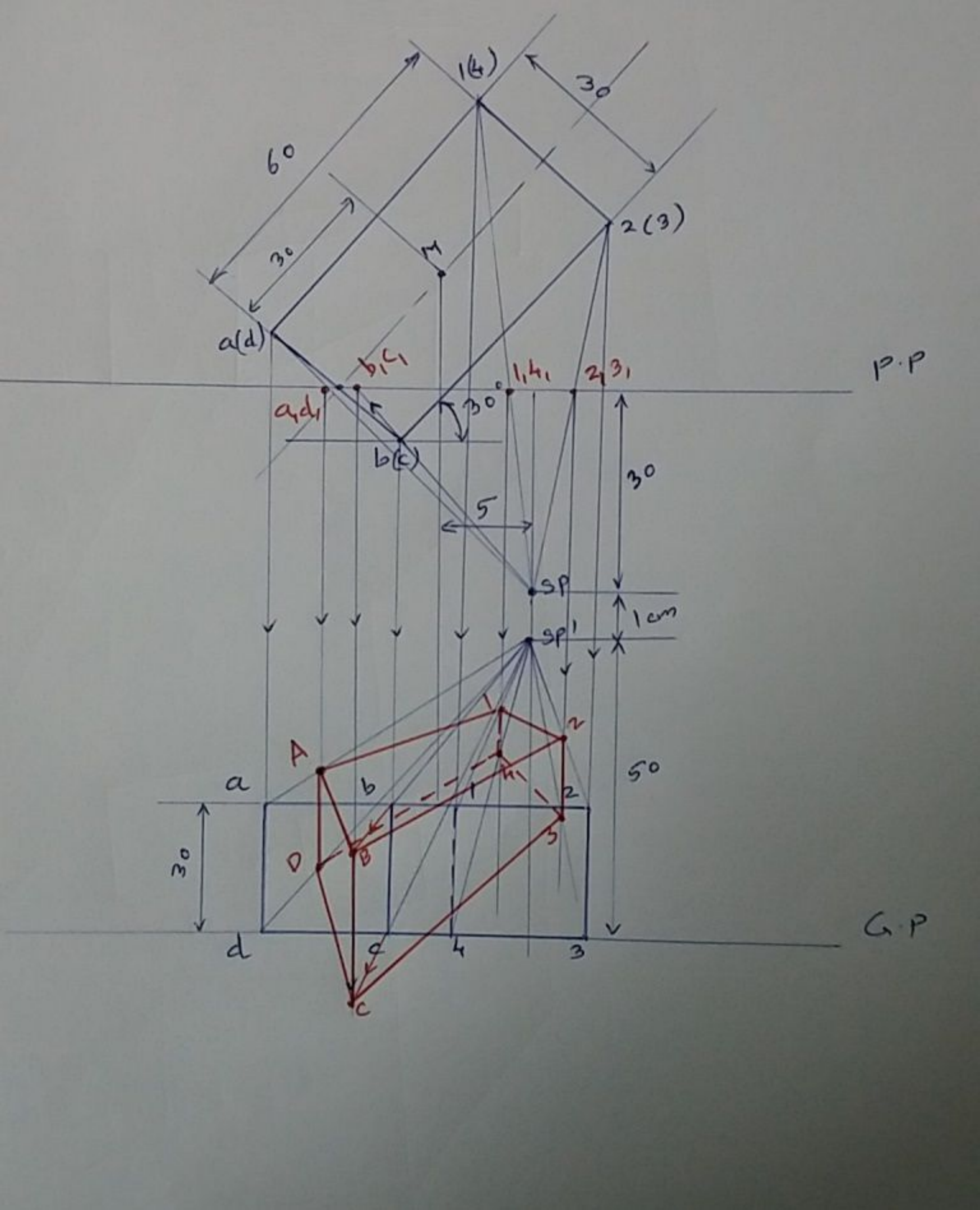

1(4)
30
60
2(3)
30
M
a(d)
P.P
30°
b(c)
30
5
SP
1 cm
SP1
50
a
b
1
2
30
G.P
d
c
4
3


1(4)
30
60
30
2(3)
a(d)
P.P
b,c,
1,4,
2,3,
a,d,
30°
b(c)
30
5
SP
1 cm
SP'
50
a
b
1
2
30
G.P
d
c
4
3


1(4)
3o
6o
3o
2(3)
M
a(d)
b,c1
1,41
2,31
P·P
a1d1
30°
b(c)
30
5
SP
1cm
SP1
A
a
b
1
2
50
30
D
d
c
4
3
G·P


1(4)
30
60
30
2(3)
M
a(d)
b1c1
1,4,
2,3,
P.P
a1d1
30°
b(c)
30
5
SP
1cm
SP1
A
50
a
b
1
2
30
D
B
G.P
d
c
4
3
C


1(6)
3
0
6
0
3
0
2(3)
a(d)
b,c,
1,4,
2,3,
P.P
a,d,
3
0
°
b(c)
3
0
5
sp
1 cm
sp1
1
2
4
5
0
A
a
b
1
2
3
D
B
3
0
G.P
d
c
4
3
C


1(4)
30
60
30
2(3)
M
a(d)
b,c,
1,4,
2,3,
P·P
a,d,
30°
b(c)
30
5
Sp
1cm
Sp'
1
2
A
a
b
50
30
D
B
3
G·P
d
c
4
3
C