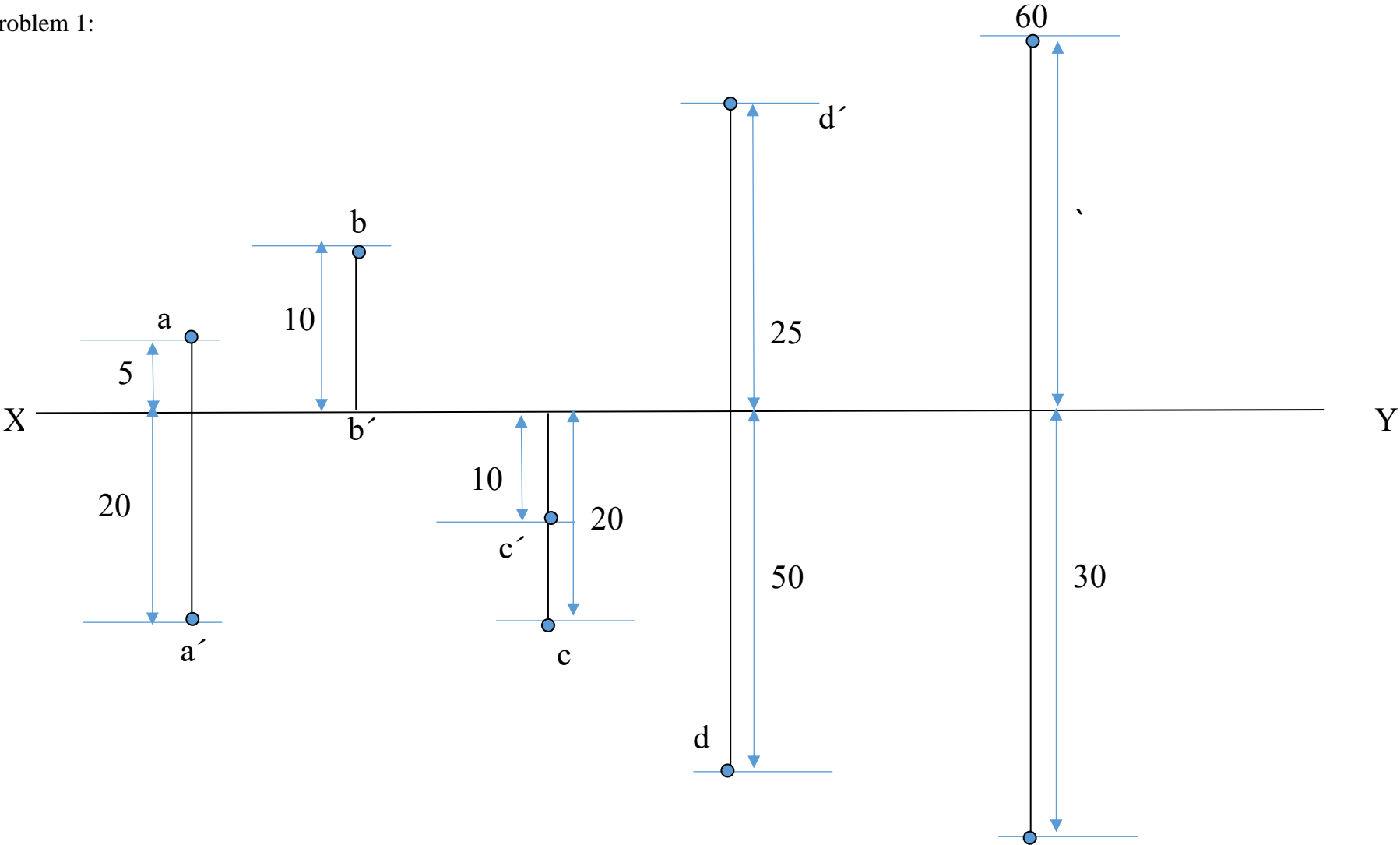


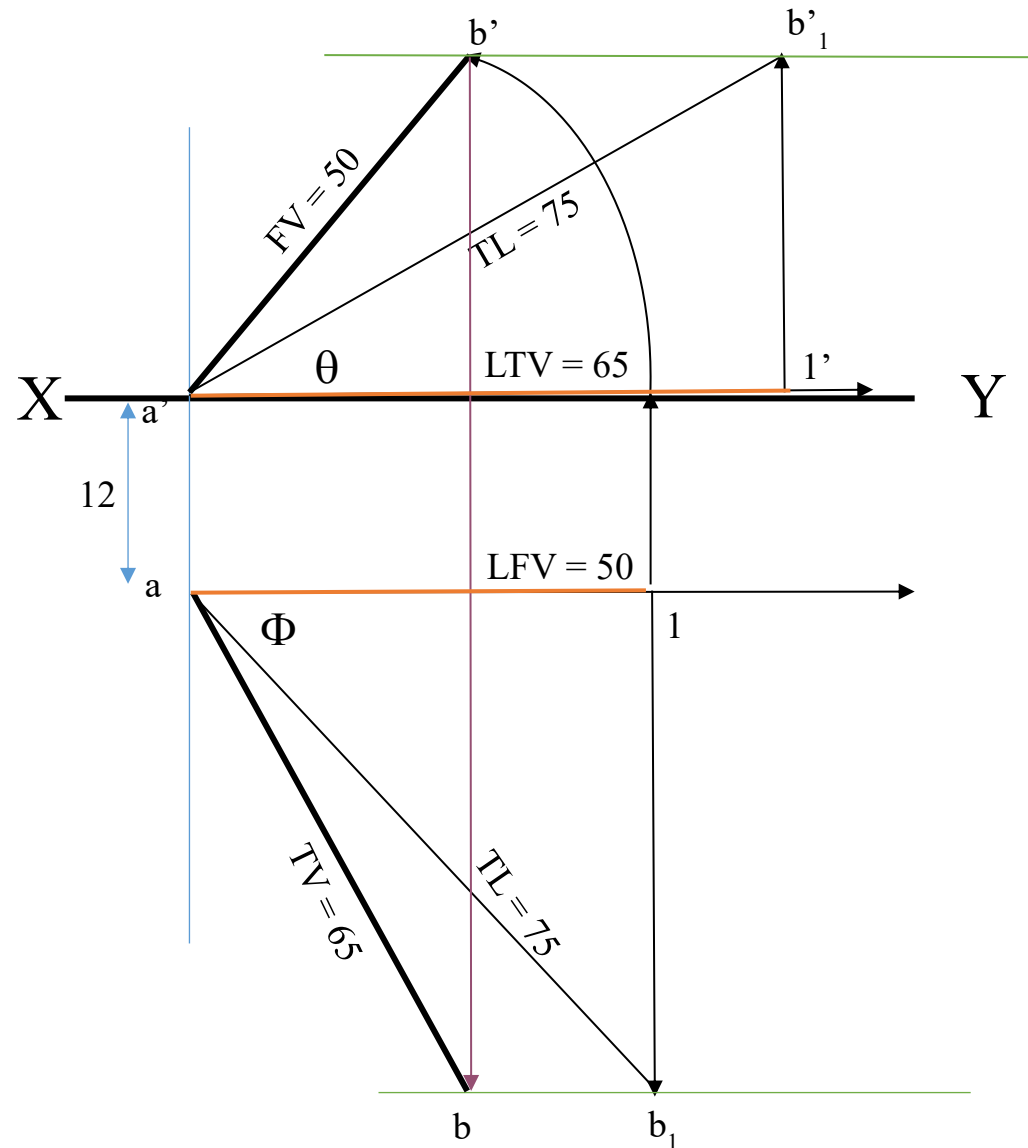
Problem 1:



Problem 2:

SOLUTION STEPS:

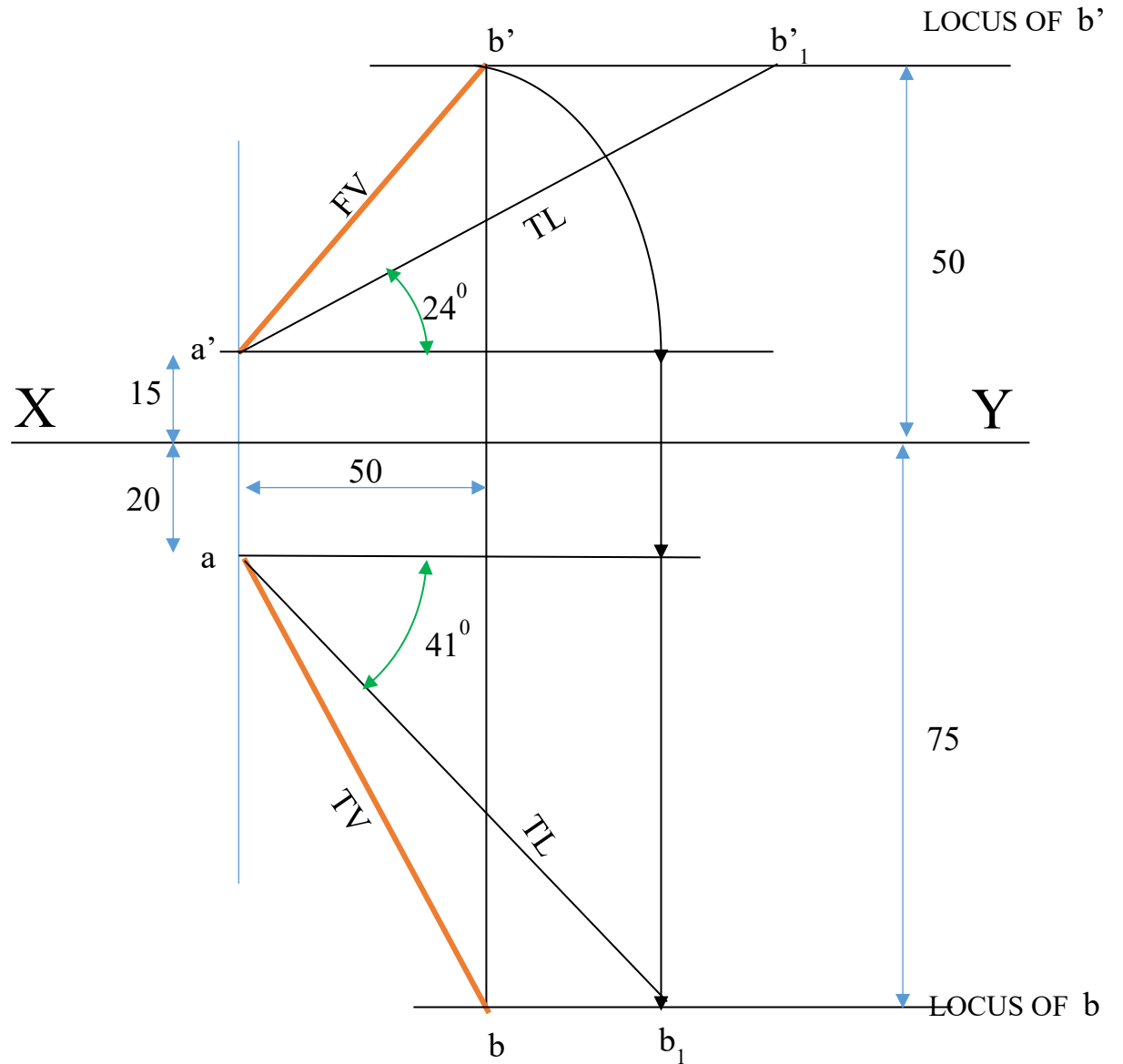
1. Draw XY line and one projector.
2. Locate a' on XY and a 12 mm below XY line.
3. Draw locus from these points.
4. Cut 65mm distance on locus of a' & mark $1'$ on it as it is LTV.
5. Similarly cut 50mm on locus of a and mark point 1 as it is LFV.
6. From $1'$ draw a vertical line upward and from a' taking TL (75mm) in compass, mark b'_1 point on it.
- Join a' b'_1 points.
7. Draw locus from b'_1
8. With same steps below get b_1 point and draw also locus from it.
9. Now rotating one of the components i.e., $a-1$ locate b' and join a' with it to get FV.
10. Locate TV similarly and measure angles



Problem 3:

Solution steps:

1. Draw XY line and one projector.
 2. Locate a' 15 mm above XY and a 20 mm below XY line.
 3. Draw locus from these points.
 4. Draw another locus b' at 50 mm above XY and b at 75 mm below XY.
 5. Draw vertical line at 50mm from the a' or a (distance between end projectors)
 6. Vertical line cuts locus of b' at b' and locus of b at b .
 7. Draw line $a'-b'$ which is FV and join $a-b$ which is TV
 8. Draw one projector from b' on locus of a and extend up to locus of b and name as b_1 .
 9. Join $a-b_1$ which is the TL.
 10. Similarly follow same steps above to get b_1' . $a'-b_1'$ is the TL.
- Then find out the inclinations



Problem4:

SOLUTION STEPS:-

1. Draw XY line, one projector and locate **a'** 10 mm above XY.
2. Draw locus 100 mm below XY for points **b** & **b₁**
3. Draw loci for VT and HT, 30 mm & 45 mm below XY respectively.
4. Take 45° angle from **a'** and extend that line backward to locate **h'** and **VT**. Locate **v** on XY above VT. Locate HT below **h'** as shown.
5. Then join **v – HT** and extend to get top view end **b**.
6. Draw projector upward and locate **b'**. Make **ab** & **a'b'** dark.
7. Now as usual rotating views find TL and it's inclinations.

