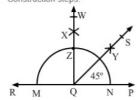


Exercise 14B

Q3

Answer:

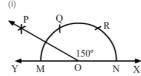
Construction steps



- 1. Draw a line PR.
- 2. Take a point Q on PR. With Q as the centre and any convenient radius, draw an arc cutting AC at M and N.
- 3. With N as the centre and radius more than half of MN, draw an arc.
- 4. With M as the centre and the same radius as before, draw another arc to cut the previous arc at X.
- 5. Draw QX, meeting the arc at Z. Produce it to W.
- 6. With Z as the centre and radius more than half of ZN, draw an arc.
- 7. With N as the centre and the same radius as in step (6), draw another arc, cutting the previously drawn arc at a point Y.
- 8. Draw QY and produce it to point S.
- ∠POS is the required angle of 45°.

Q4

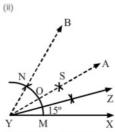
Answer:



Steps for construction:

- 1. Draw a line XY and take a point O.
- 2. With O as the centre and any suitable radius, draw an arc cutting XY at M and N.
- 3. With N as the centre and the same radius, draw an arc cutting MN at R.
- 4.With R as the centre and the same radius as before, draw another arc cutting MN at ${\rm Q}$
- 5. With ${\bf Q}$ as the centre and radius less than ${\bf M}{\bf Q}$ draw an arc.
- 6. With M as the centre and the same radius draw another arc cutting the previously drawn arc at P
- 5. Join PO.

∴ ∠XOP = 150°



Steps for construction:

- 1. Draw a ray XY.
- 2. With X as the centre and any convenient radius, draw an arc cutting XY at M.
- 3. With M as the centre and the same radius, draw an arc cutting the previously drawn arc at N.
- 4. Draw YN and produce it to B.
- Draw the bisector AY of ∠XYB.
- 5. Again, draw the bisector YZ of ∠XYA.
- .: _ XYZ = 15°