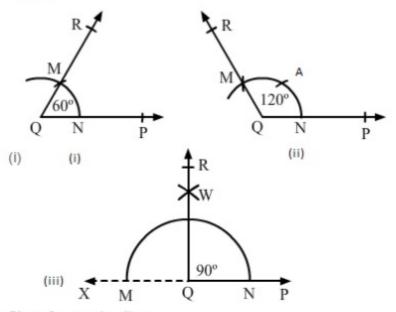


### Exercise 14B

# Q1

## Answer:



# Steps for construction:

## 1. Draw a ray QP.

- 2. With Q as the centre and any convenient radius, draw an arc cutting QP at N.
- 3. With N as the centre and the same radius as before, draw another arc to cut the previous arc at M.
- 4. Draw QM and produce it to R.
- ∠ POR is the required angle of 60°

Steps for construction:

- 1. Draw a ray QP.
- 2. With Q as the centre and any convenient radius, draw an arc cutting QP at N.
- 3. With N as the centre and the same radius, cut the arc at A. Again, with A as the centre and the same radius, cut the arc at M.

# 4. Draw QM and produce it to R. $\angle PQR$ is the required angle of $120^{\circ}$ .

(iii)

Steps for construction:

- 1. Draw a line PX.
- 2. Take a point Q on AC. With Q as the centre and any convenient radius, draw an arc cutting AX at
- 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 W.
- 5. Draw QW produce it to R.

### Answer:

Constructions steps:



- 1. Draw a ray QP.
- 2. Wth Q as the centre and any convenient radius, draw an arc cutting QP at N.
- 3. With N as the centre and radius same as before, draw another arc to cut the previous arc at M.
- 4. Draw QM and produce it to R.

### ∠PQR is an angle of 60°.

- 5. With M as the centre and radius more than half of MN, draw an arc.
- 6. With N as the centre and radius same as in step (5), draw another arc, cutting the previously drawn arc at point X.
- 7. Draw QX and produce it to point S.

Ray QS is the bisector of  $\angle PQR$ .

\*\*\*\*\*\*\*\*\* END \*\*\*\*\*\*\*