Exercise 14B

Q1

Answer :

(i)   (i)

(ii)

(iii)

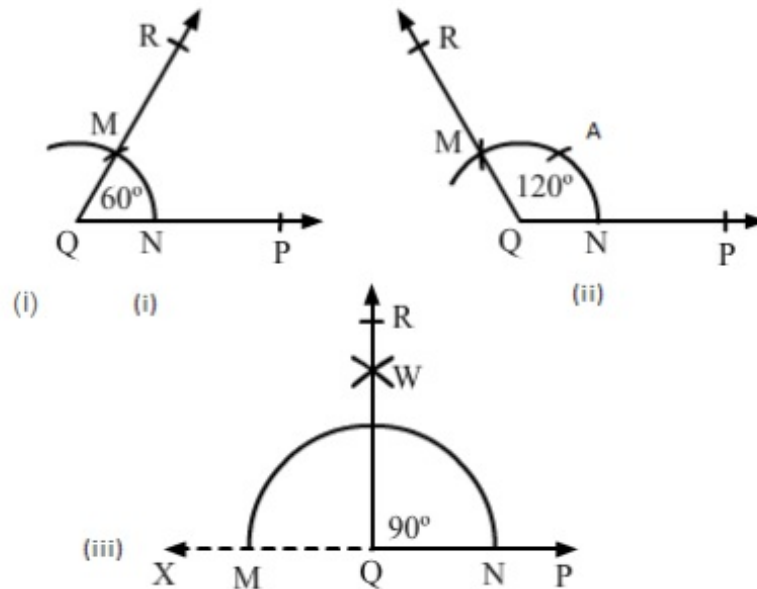**Steps for construction:**

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 60º

(ii)

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.
∠PQR is the required angle of 120˚.

(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 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 W.

5. Draw QW produce it to R.

Q2

Answer :

Constructions steps:
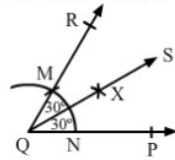
1. Draw a ray QP.

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 ∠PQR.

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