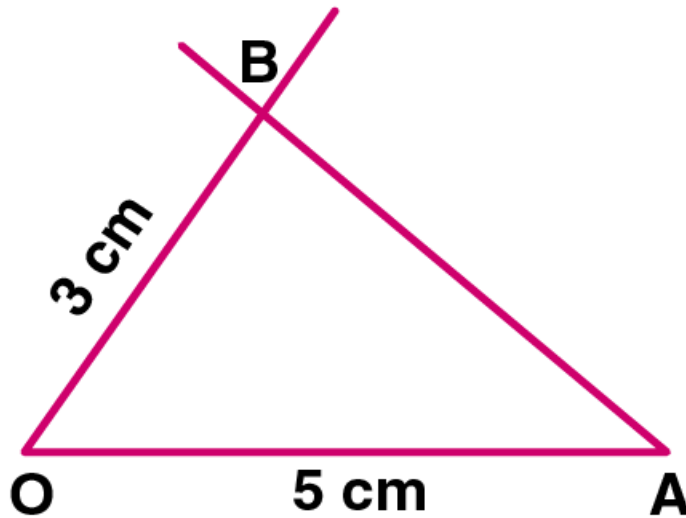


EXERCISE 25(D)

1. Draw a line segment $OA = 5$ cm. Use set-square to construct angle $AOB = 60^\circ$, such that $OB = 3$ cm. Join A and B; then measure the length of AB.

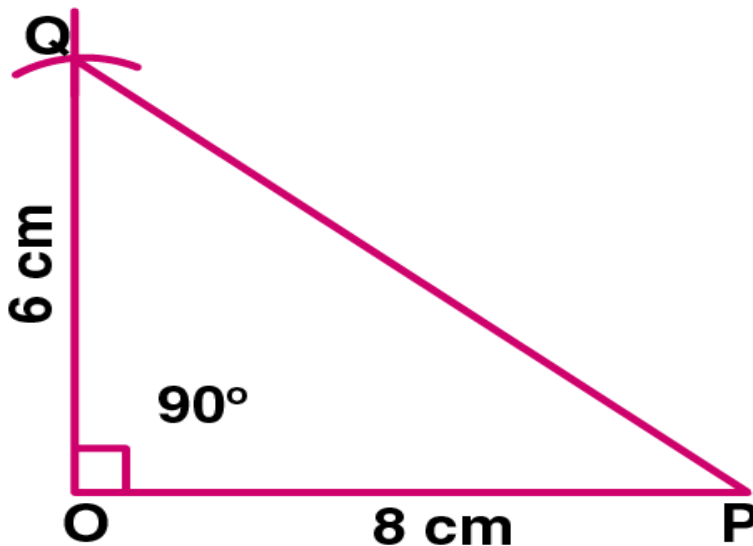
Solution:

The length of $AB = 4.4$ cm (approximately)



2. Draw a line segment $OP = 8$ cm. Use set-square to construct $\angle POQ = 90^\circ$; such that $OQ = 6$ cm. Join P and Q; then measure the length of PQ.

Solution:

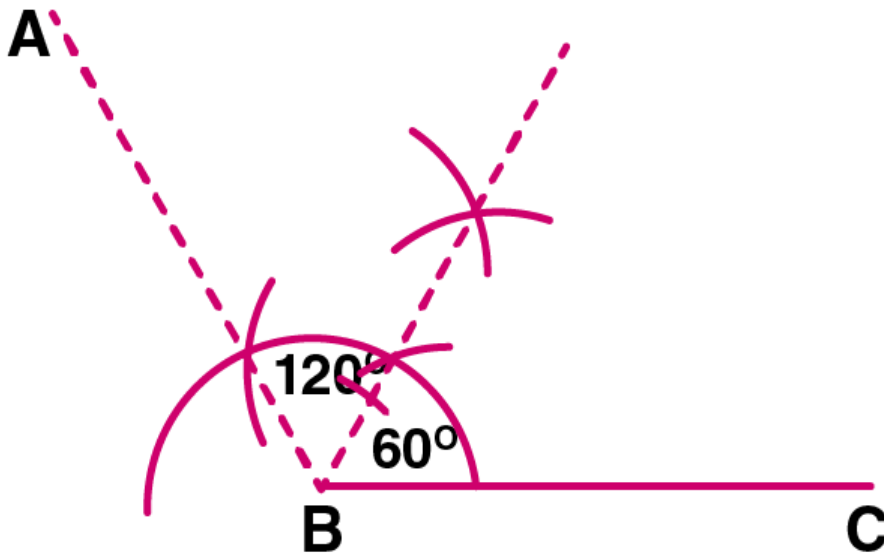


Measuring the length of $PQ = 10$ cm

3. Draw $\angle ABC = 120^\circ$. Bisect the angle using ruler and compasses. Measure each angle so obtained and check whether or not the new angles obtained on bisecting

$\angle ABC$ are equal.

Solution:

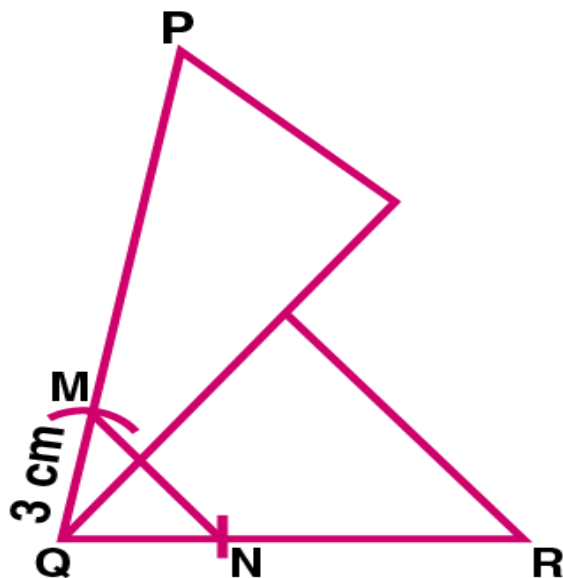


Each angle measure = 60°

Yes, the angles obtained on bisecting $\angle ABC$ are equal

4. Draw $\angle PQR = 75^\circ$ by using set-squares. On PQ mark a point M such that $MQ = 3$ cm. On QR mark a point N such that $QN = 4$ cm. Join M and N. Measure the length of MN.

Solution:



The length of $MN = 4.3$ cm