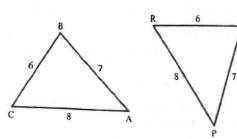
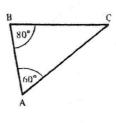
Revision Work 3

State whether the following pairs of triangles are congruent or not. Give reasons for your answers. All lengths are in cm.

1.

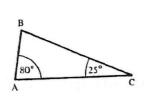


2.

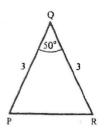


50°

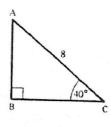
3.



Q 65° A C

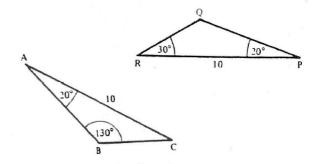


5.

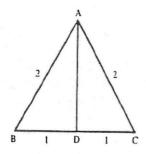


6.

4.

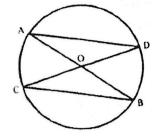


7.



Are ΔABD and ΔACD congruent?

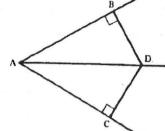
8.



AB and CD are diameters of the circle and O is the centre.

Prove that \triangle AOD and \triangle COB are congruent. Hence prove that AD = BC.

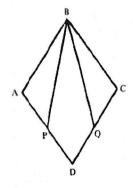
9.



AD bisects \angle BAC, DB is perpendicular to AB and DC is perpendicular to AC.

Prove that \triangle ABD and \triangle ACD are congruent. Hence prove that AB = AC.

10.

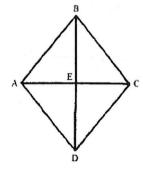


ABCD is a rhombus.

P is the midpoint of AD and Q is the midpoint of CD.

- a) Prove that BP = BQ.
- b) Prove that $\angle APB = \angle CQB$.

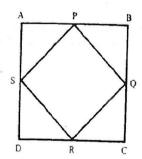
11.



ABCD is a rhombus.

Prove that \triangle ABE and \triangle CBE are congruent. What can you say about \angle AEB and \angle BEC?

12.



ABCD is a square and P, Q, R and S are the midpoints of AB, BC, CD and DA.

Prove that PQRS is a square.