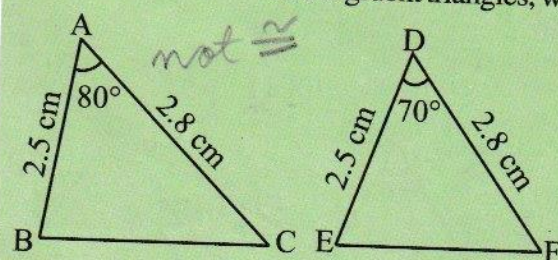
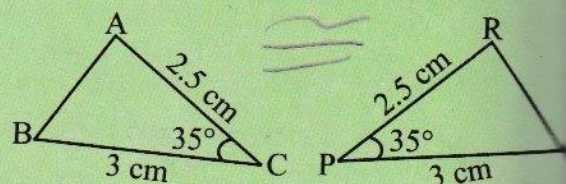


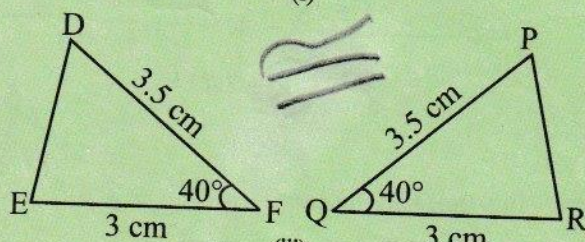
3. In Fig 7.24, measures of some parts of the triangles are indicated. By applying S congruence rule, state the pairs of congruent triangles, if any, in each case. In case of congruent triangles, write them in symbolic form.



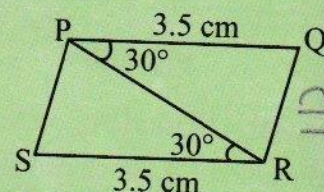
(i)



(ii)



(iii)



(iv)

Fig 7.24

4. In Fig 7.25, \overline{AB} and \overline{CD} bisect each other at O.

(i) State the three pairs of equal parts in two triangles AOC and BOD.

(ii) Which of the following statements are true?

(a) $\triangle AOC \cong \triangle DOB$

(b) $\triangle AOC \cong \triangle BOD$

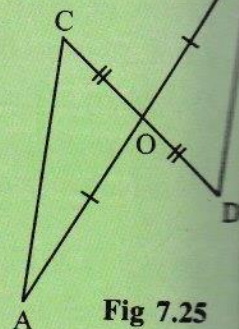


Fig 7.25

ASA Game

Can you draw Appu's triangle, if you know

(i) only one of its angles?

(ii) only two of its angles?

(iii) two angles and any one side?

(iv) two angles and the side included between them?

Attempts to solve the above questions lead us to the following criterion:

ASA Congruence criterion:

If under a correspondence, two angles and the included side of a triangle are equal to two corresponding angles and the included side of another triangle, then the triangles are congruent.

EXAMPLE 6 By applying ASA congruence rule, it is to be established that $\triangle ABC \cong \triangle RPQ$ and it is given that $BC = RP$. What additional information is needed to establish the congruence?