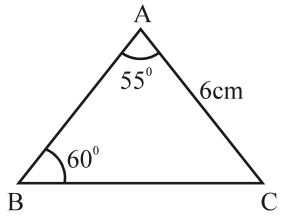
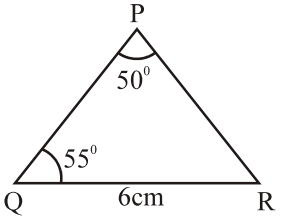
Chapter—7

Congruence of Triangles

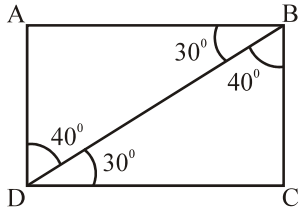
1. In each of the given of triangle applying only ASA congrence criterion, determine which triangle are congruent. Also write the congruent triangles in symbolic form.

(a)

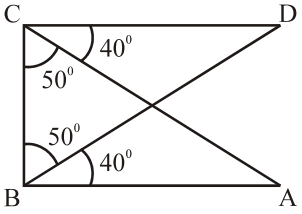




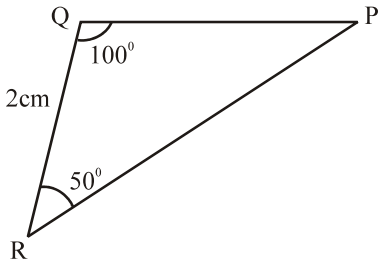
(b)

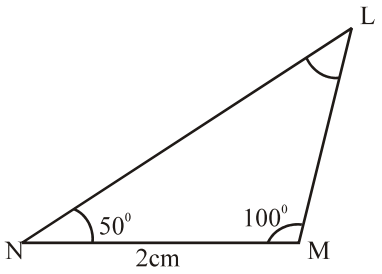


(c)



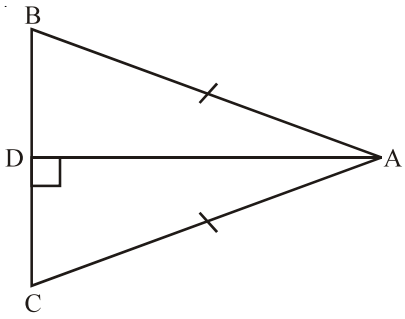
(d)





2. In each of the given pair of triangle applying only RHS congruence criterion, determine which pairs of triangles are congruent. Also write the congruent triangles in symbolic form.

(a)



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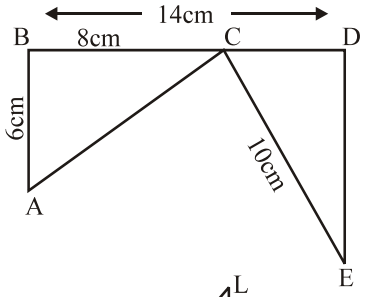

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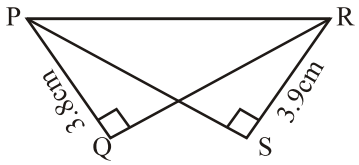

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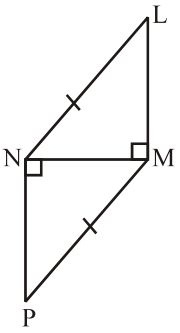
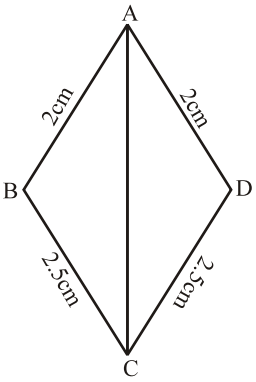
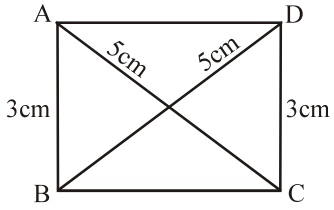


3. In each of the given pair of triangles applying only SSS congruence criterion, determine which pairs of triangles are congruent. Also write the congruent triangles in symbolic form.

(a)



(b)



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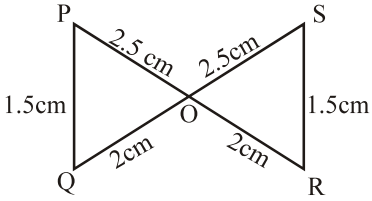

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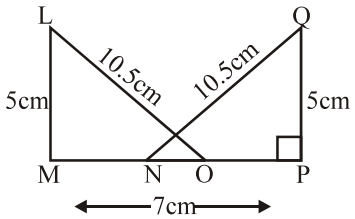
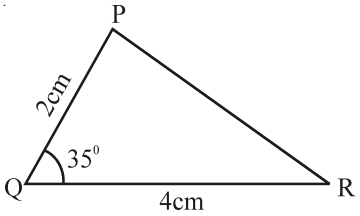
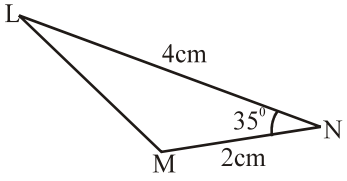


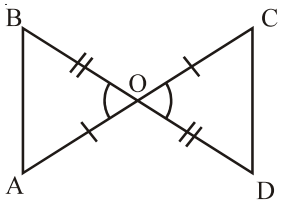
4. In each of the given pair of triangles applying only SAS congruence criterion, determine which triangles are congruent. Also write the congruent triangles in symbotic form.

(a)

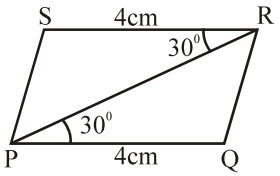




(b)



(c)



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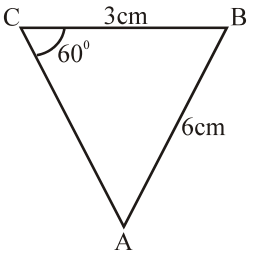
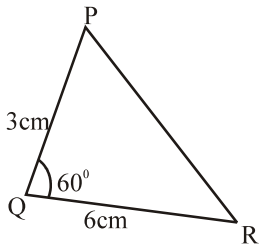




5. If ΔPQR and ΔLMN are congruent under the correspondence QPR ↔ LMN then fill up the blanks :

(i) ∠R = ... (iv) ∠QR = ...

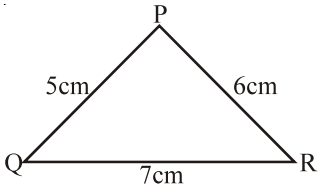
(i) ∠P = ... (v) ∠QP = ...

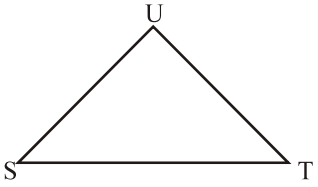
(iii) ∠Q = ... (vi) ∠RP = ...

6. Triangles DEF and LMN anre both isosceles with DE = DF and LM = LN. If DE = LM and EF = MN then, are the two triangles congruent? Which condition do you use?

If ∠E = 50°, what is the measure of ∠N?

7.





If ΔPQR is congrement to ΔSTU then what is the length of TU?

8. State whether the given statements are True or False.

(i) If three corresponding angles of two triangles are equal then triangles are congruent.

(ii) The congruent figure super impose each other completely.

(iii) The top and bottm faces of a kaaleidoscope are congruent.

(iv) Two figure are congruent, if both have the same shape.