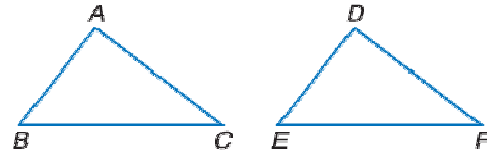


Lesson 5-5

Example 1

Name the congruent sides and angles of  $\triangle ABC$  and  $\triangle DEF$ .



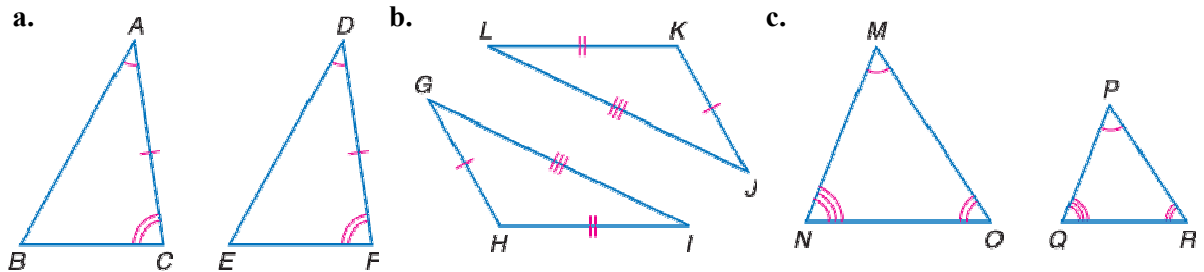
Solution

$$\begin{array}{ll} \overline{AB} \cong \overline{DE} & \angle A \cong \angle D \\ \overline{BC} \cong \overline{EF} & \angle B \cong \angle E \\ \overline{AC} \cong \overline{DF} & \angle C \cong \angle F \end{array}$$

Triangles  $ABC$  and  $DEF$  are congruent, written  $\triangle ABC \cong \triangle DEF$ .

Example 2

State whether each pair of triangles is congruent. If a pair is congruent, name the congruence and the appropriate postulate.



Solution

- a.  $\triangle ABC \cong \triangle DEF$  by the Angle-Side-Angle Postulate (ASA).      b.  $\triangle GHI \cong \triangle JKL$  by the Side-Side-Side Postulate (SSS).      c. not congruent