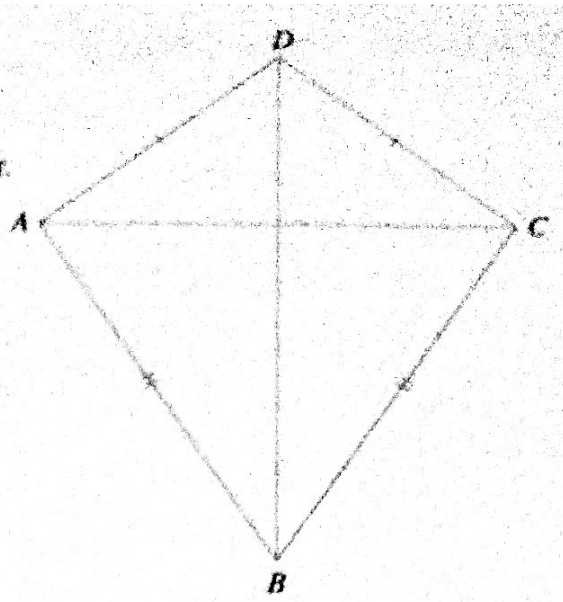
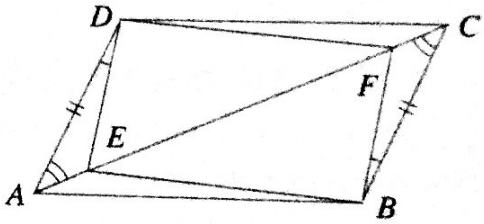
4. In the figure, $AD = CD$ and $AB = CB$.
Use congruent triangles to show that
(a) BD bisects $A\hat{D}C$,
(b) AC and DB are perpendicular to each other.

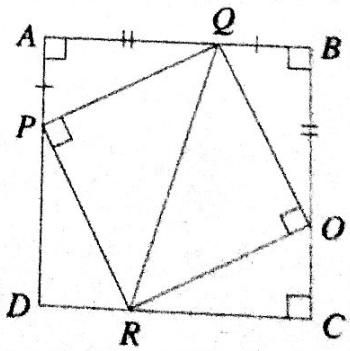


5. A rectangle is a special parallelogram with four right angles. Use congruent triangles to show that its diagonals are equal.

6. **(a)** Is $\triangle ADE$ congruent to $\triangle CBF$? Give reason.
(b) Explain why
(i) $\triangle DEF \equiv \triangle BFE$,
(ii) $\triangle ABE \equiv \triangle CDF$.



7. **(a)** Is $\triangle PAQ$ congruent to $\triangle QBO$? Give reason.
(b) Show that
(i) $\triangle PQR \equiv \triangle ORQ$,
(ii) $\triangle PDR \equiv \triangle RCO$.



8. In the figure, $DE \parallel BC$ and $AD = AE$. Show that
(a) $BD = CE$,
(b) $BE = CD$.