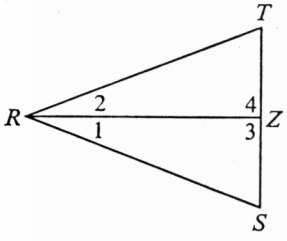
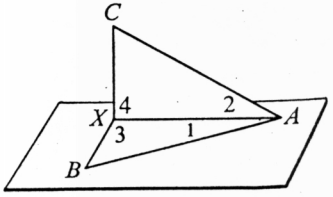
A In Exs. 1–6 prove that $\triangle RZS \cong \triangle RZT$.

1. Given: $\angle 1 = \angle 2$; $\angle 3 = \angle 4$.
2. Given: $\angle 1 = \angle 2$; $\angle S = \angle T$.
3. Given: $\angle 3$ and $\angle 4$ are rt. $\measuredangle$s; $RS = RT$.
4. Given: $\angle 3$ and $\angle 4$ are rt. $\measuredangle$s; $\angle 1 = \angle 2$.
5. Given: $\angle 3 = \angle 4$; $\angle S = \angle T$.
6. Given: $\angle 1 = \angle 2$; $RS = RT$.



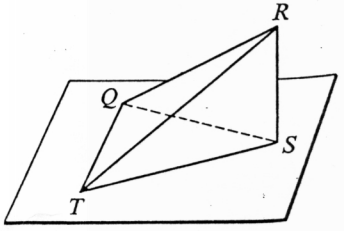
Exs. 1–6

7. Given: $\angle 1 = \angle 2$; $\angle 3 = \angle 4$.
   Prove: $\triangle ABX \cong \triangle ACX$.
8. Given: $\angle 3$ and $\angle 4$ are rt. $\measuredangle$s; $\angle B = \angle C$.
   Prove: $\triangle ABX \cong \triangle ACX$.



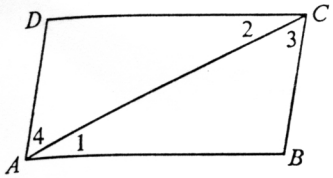
Exs. 7, 8

9. Given: $\angle RST = \angle RSQ$; $\angle RTS = \angle RQS$.
   Prove: $\triangle RST \cong \triangle RSQ$.
10. Given: $\overline{RS} \perp \overline{ST}$; $\overline{RS} \perp \overline{SQ}$; $\angle SRT = \angle SRQ$.
    Prove: $\triangle RST \cong \triangle RSQ$.
11. Given: $\overline{RS} \perp \overline{ST}$; $\overline{RS} \perp \overline{SQ}$; $\angle STR = \angle SQR$.
    Prove: $\triangle RST \cong \triangle RSQ$.
12. Given: $RT = RQ$; $ST = SQ$.
    Prove: $\triangle RST \cong \triangle RSQ$.



Exs. 9–12

13. Given: $\overline{AB} \parallel \overline{DC}$; $\overline{AD} \parallel \overline{BC}$.
    Prove: $\triangle ABC \cong \triangle CDA$.



Exs. 13–16

14. Given: $\overline{AB} \parallel \overline{DC}$; $\angle B = \angle D$.
    Prove: $\triangle ABC \cong \triangle CDA$.
15. Given: $\angle B$ and $\angle D$ are rt. $\measuredangle$s; $\angle 1 = \angle 2$.
    Prove: $\triangle ABC \cong \triangle CDA$.
16. Given: $\overline{AD} \perp \overline{DC}$; $\overline{CB} \perp \overline{AB}$; $\overline{AD} \parallel \overline{BC}$.
    Prove: $\triangle ABC \cong \triangle CDA$.