

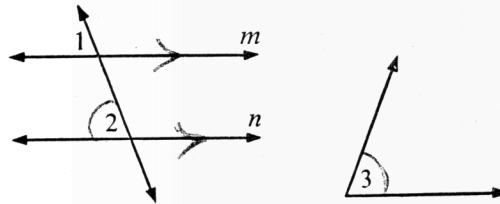
A

1. Given: $m \parallel n$; $\angle 2 \cong \angle 3$.

Prove: $\angle 1 \cong \angle 3$.

2. Given: $m \parallel n$; $\angle 1 \cong \angle 3$.

Prove: $\angle 2 \cong \angle 3$.



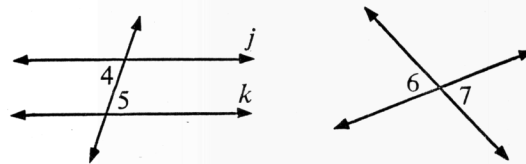
Exs. 1, 2

3. Given: $j \parallel k$; $\angle 4 \cong \angle 7$.

Prove: $\angle 5 \cong \angle 6$.

4. Given: $j \parallel k$; $\angle 5 \cong \angle 6$.

Prove: $\angle 4 \cong \angle 7$.



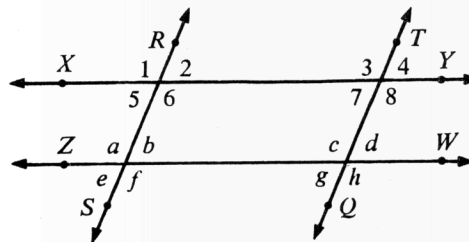
Exs. 3, 4

5. Given: $\overline{XY} \parallel \overline{ZW}$; $\overline{RS} \parallel \overline{TQ}$.

Prove: $\angle 1 \cong \angle h$.

6. Given: $\overline{XY} \parallel \overline{ZW}$; $\overline{RS} \parallel \overline{TQ}$.

Prove: $\angle b \cong \angle 7$.



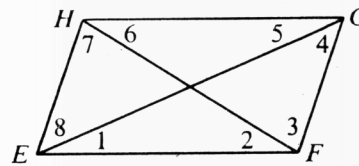
Exs. 5, 6

7. Given: $\overline{HG} \parallel \overline{EF}$; $\overline{HE} \parallel \overline{GF}$.

Prove: $\angle GHE \cong \angle EFG$.

8. Given: $\overline{HG} \parallel \overline{EF}$; $\overline{HE} \parallel \overline{GF}$.

Prove: $\angle HEF \cong \angle FGH$.



Exs. 7, 8

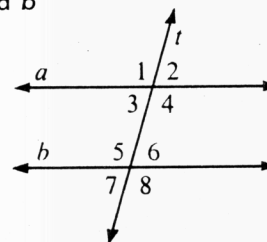
In Exs. 9–12, it is given that parallel lines a and b are cut by transversal t .

9. Prove: $m\angle 1 + m\angle 7 = 180$.

10. Prove: $m\angle 2 + m\angle 8 = 180$.

11. Prove: $m\angle 3 + m\angle 8 = 180$.

12. Prove: $m\angle 6 + m\angle 1 = 180$.



Exs. 9–12