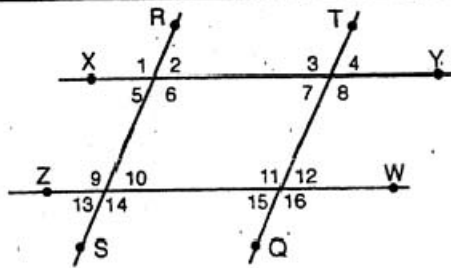


Parallel Line Proofs 3

4. Given: $\overline{XY} \parallel \overline{ZW}, \overline{RS} \parallel \overline{TQ}$

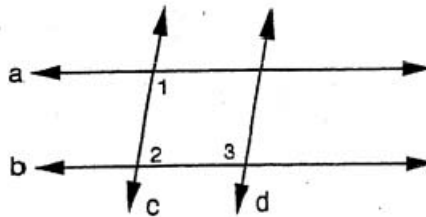
Prove: $m\angle 1 = m\angle 16$



STATEMENTS	REASONS
1. $\overline{XY} \parallel \overline{ZW}, \overline{RS} \parallel \overline{TQ}$	1. Given
2. $m\angle 1 = m\angle 8$	2.
3. $m\angle 8 = m\angle 16$	3.
4. $m\angle 1 = m\angle 16$	4.

5. Given: $a \parallel b$, $\angle 2$ is supp. to $\angle 3$

Prove: $m\angle 1 = m\angle 3$

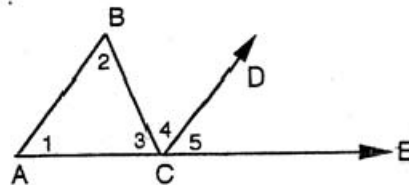


STATEMENTS	REASONS
1. $a \parallel b$, $\angle 2$ is supp. to $\angle 3$	1. Given
2. $m\angle 2 + m\angle 3 = 180^\circ$	2.
3. $\angle 1$ is supp. to $\angle 2$	3.
4.	4. Definition of supplementary angles
5. $m\angle 1 + m\angle 2 = m\angle 2 + m\angle 3$	5.
6.	6. Subtraction property

6. Complete the proof:

Given: $\overline{AB} \parallel \overline{CD}; m\angle 4 = m\angle 5$

Prove: $m\angle 1 = m\angle 2$



STATEMENTS	REASONS
1.	1.