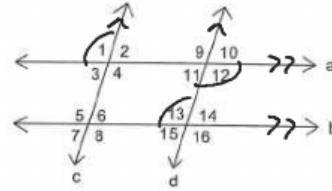


1. Given: $a \parallel b$; $c \parallel d$

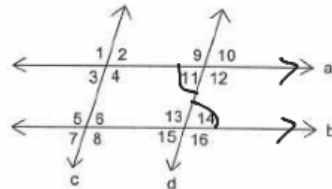
Prove: $\angle 1 \cong \angle 13$



Statements	Reasons
1. $a \parallel b$; $c \parallel d$	1. Given
2. $\angle 1 \cong \angle 12$	2. Alternate Exterior \angle 's \cong
3. $\angle 12 \cong \angle 13$	3. Alternate Interior \angle 's \cong
4. $\angle 1 \cong \angle 13$	4. Substitution prop

2. Given: $a \parallel b$

Prove: $m\angle 9 + m\angle 14 = 180^\circ$

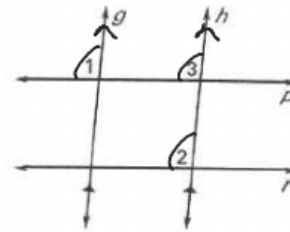


Statements	Reasons
1. $a \parallel b$	1. Given
2. $m\angle 9 + m\angle 11 = 180^\circ$	2. Linear Pair Postulate
3. $m\angle 11 = m\angle 14$	3. Alternate Interior \angle 's \cong
4. $m\angle 9 + m\angle 14 = 180^\circ$	4. Substitution prop

3. GIVEN: $g \parallel h$, $\angle 1 \cong \angle 2$

PROVE: $p \parallel r$

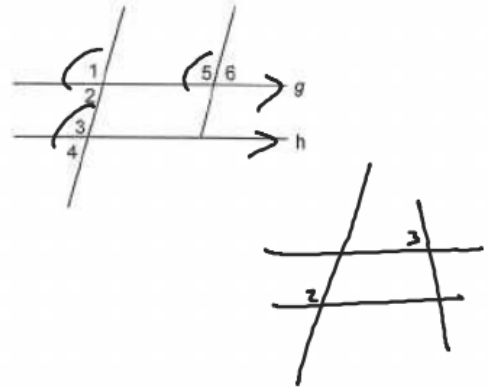
Statements	Reasons
1. $g \parallel h$, $\angle 1 \cong \angle 2$	1. Given
2. $\angle 1 \cong \angle 3$	2. Corresponding \angle 's \cong
3. $\angle 2 \cong \angle 3$	3. Substitution prop
4. $p \parallel r$	4. If corresponding \angle 's are \cong then lines are \parallel .



4. Given: $g \parallel h$; $\angle 1 \cong \angle 5$

Prove: $\angle 5 \cong \angle 3$

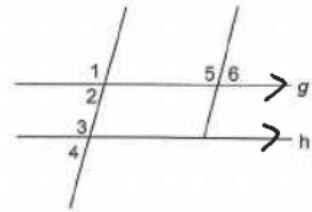
Statements	Reasons
1) $g \parallel h$; $\angle 1 \cong \angle 5$	1) Given
2) $\angle 1 \cong \angle 3$	2) Corresponding \angle 's \cong
3) $\angle 5 \cong \angle 3$	3) Substitution prop



5. Given: $g \parallel h$; $\angle 6$ & $\angle 3$ are supplementary

Prove: $\angle 6 \cong \angle 2$

Statements	Reasons
1) $g \parallel h$; $\angle 6 + \angle 3$ are supp	1) Given
2) $\angle 2 + \angle 3$ are supp	2) Same-Side Interior \angle 's
3) $m\angle 6 + m\angle 3 = 180$ $m\angle 2 + m\angle 3 = 180$	3) Definition of Supp \angle 's
4) $m\angle 6 + m\angle 3 = m\angle 2 + m\angle 3$ $\quad \quad \quad -m\angle 3 \quad \quad \quad -m\angle 3$	4) Substitution prop.



Statement	Reason
5) $m\angle 6 = m\angle 2$	5) Subtraction prop.

6. Given: $\overline{CD} \parallel \overline{AB}$; $\angle 2 \cong \angle 1$

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

Statements	Reasons
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