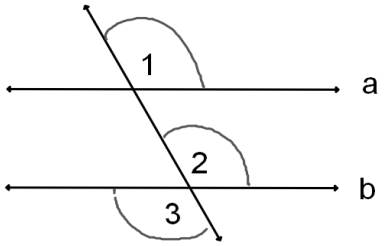
3-2 Using Parallel Lines

Oct 4

Ex. 1

Given: $a \parallel b$

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

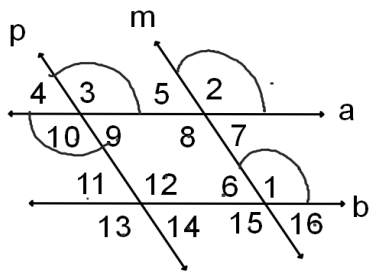


Statements	Reasons
1. $a \parallel b$	1. given
2. $\angle 1 \cong \angle 2$	2. If $\parallel$ lines, corres $\angle$s $\cong$
3. $\angle 2 \cong \angle 3$	3. vert. $\angle$s $\cong$
4. $\angle 1 \cong \angle 3$	4. Transitive

Ex. 2

Given: $a \parallel b, p \parallel m$

Prove: $\angle 1 \cong \angle 10$



Statements	Reasons
(1) $a \parallel b, p \parallel m$	(1) given
(2) $\angle 1 \cong \angle 2$	(2) If lines $\parallel$, corr $\angle$s $\cong$.
(3) $\angle 2 \cong \angle 3$	(3) If lines $\parallel$, corr $\angle$s $\cong$
(4) $\angle 1 \cong \angle 3$	(4) transitive
(5) $\angle 3 \cong \angle 10$	(5) vert $\angle$s $\cong$
(6) $\angle 1 \cong \angle 10$	(6) transitive