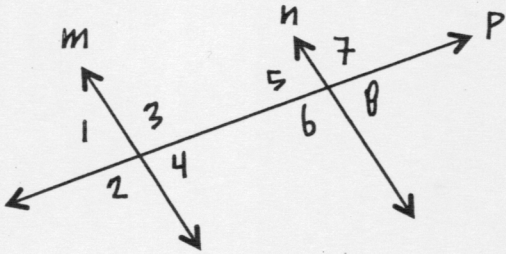


# GEOMETRY: TRANSVERSAL PROOFS (CHAPTER 3.3)

## ALTERNATE INTERIOR ANGLES THEOREM

Given: Line  $m$  is parallel to line  $n$ ;  
Line  $p$  is a transversal

Prove:  $\angle 3 \cong \angle 6$

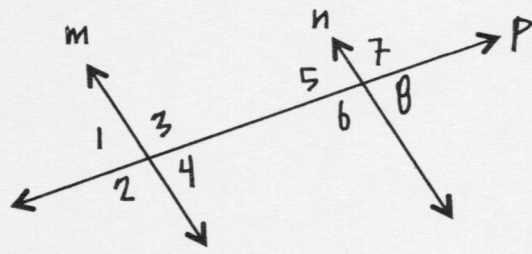


Statement	Reason

## ALTERNATE EXTERIOR ANGLES THEOREM

Given: Line  $m$  is parallel to line  $n$ ;  
Line  $p$  is a transversal

Prove:  $\angle 1 \cong \angle 8$

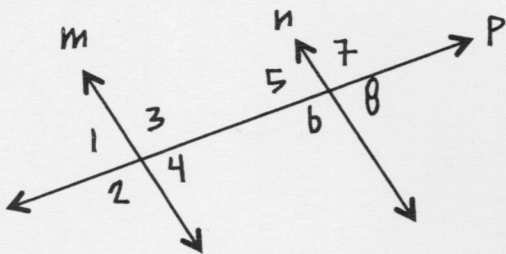


Statement	Reason

## SAME-SIDE INTERIOR ANGLES THEOREM

Given: Line  $m$  is parallel to line  $n$ ;  
Line  $p$  is a transversal

Prove:  $m\angle 3 + m\angle 5 = 180^\circ$

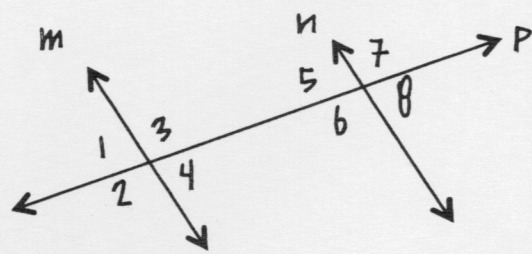


Statement	Reason

## SAME-SIDE EXTERIOR ANGLES THEOREM

Given: Line  $m$  is parallel to line  $n$ ;  
Line  $p$  is a transversal

Prove:  $m\angle 2 + m\angle 8 = 180^\circ$



Statement	Reason

