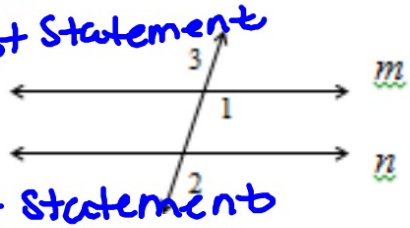
p. 16 Introduction to Proofs

First Statement

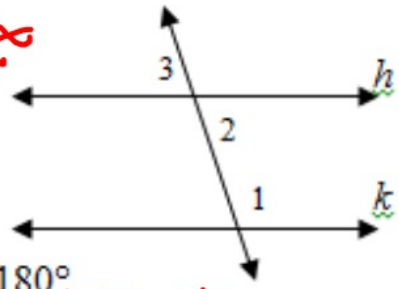
. Given: $m \nparallel n$

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



Last Statement

Statements	Reasons
① $m \parallel n$	① Given
② $\angle 2 \cong \angle 1$	② Corresponding angles are $\cong$.
③ $\angle 1 \cong \angle 3$	③ Vertical angles are $\cong$.
④ $\angle 2 \cong \angle 3$	④ Transitive property.



First statement

Given: $h \parallel k$

Prove: $m\angle 1 + m\angle 3 = 180°$

Last statement

Statements	Reasons
① $h \parallel k$	① Given
② $\angle 2 \cong \angle 3$	② Vertical Angles are $\cong$.
③ $\angle 1 + \angle 2 = 180°$	③ Same-side Interior angles are Supplementary.
④ $\angle 1 + \angle 3 = 180°$	④ Substitution