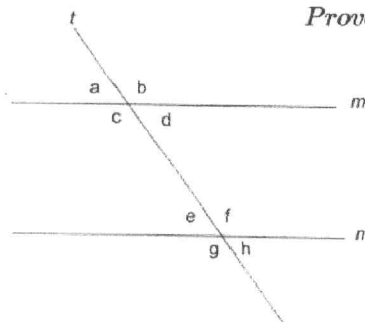
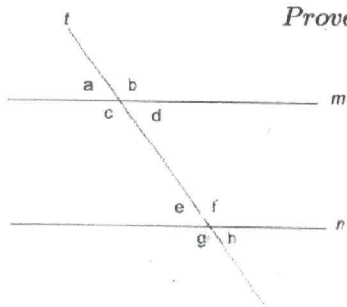




Given : $m \parallel n$
 Prove : $\angle c$ and $\angle f$ are congruent

Steps	Justifications
1) $m \parallel n$	1)
2)	2) Corresponding Angle Theorem
3) $\angle g \cong \angle f$	3)
4)	4)

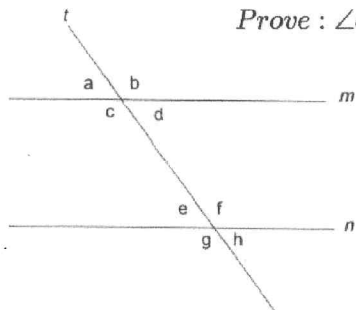


Given : $m \parallel n$
 Prove : $\angle b$ and $\angle g$ are congruent

Steps	Justification
1) $m \parallel n$	1) Given
2)	2)
3)	3)
4) $\angle b \cong \angle g$	4) transitive Transitive Property of congruence.

Given : $m \parallel n$

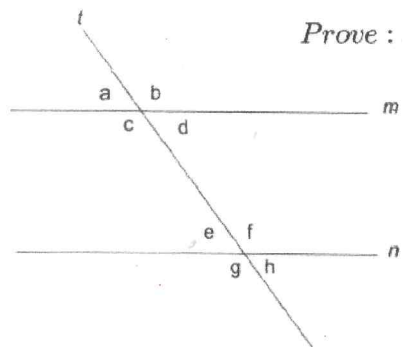
Prove : $\angle a$ and $\angle g$ are supplementary



Steps	Justifications
1)	1) Given
2)	2) Diagram
3) $\angle a$ and $\angle c$ are supplementary	3)
4)	4) Def. of supplementary angles
5) $\angle a \cong \angle e$	5)
6)	6) Def. of congruent angles
7)	7) Substitution
8) $\angle a$ and $\angle g$ are supplementary	8)

Given : $m \parallel n$

Prove : $\angle d$ and $\angle f$ are supplementary



Steps	Justifications
1) $m \parallel n$	1)
2) $\angle c$ and $\angle d$ form a linear pair	2)
3)	3) Linear Pair Theorem
4)	4)
5) linear pair $\angle f \cong \angle c$	5)
6)	6) Definition of Congruent angles
7) $m\angle f + m\angle d = 180$	7)
linear pair	linear pair
8)	8)