

Q4)

**PROOF** Copy and complete the proof of one case of Theorem 12.6.

Given:  $\angle 1$  and  $\angle 3$  are complementary.  
 $\angle 2$  and  $\angle 3$  are complementary.

Prove:  $\angle 1 \cong \angle 2$

Proof:



Statements	Reasons
a. $\angle 1$ and $\angle 3$ are complementary. $\angle 2$ and $\angle 3$ are complementary.	a. _____
b. $m\angle 1 + m\angle 3 = 90^\circ$ ; $m\angle 2 + m\angle 3 = 90^\circ$	b. Definition of angles
c. $m\angle 1 + m\angle 3 = m\angle 2 + m\angle 3$	c. _____
d. _____	d. Reflexive Property
e. $m\angle 1 = m\angle 2$	e. _____ property
f. $\angle 1 \cong \angle 2$	f. Definition of angles