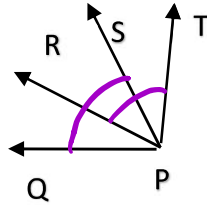


Reasoning and Proof – Proving Angles

Application Section 2.4

Name _____

1.

Given $\angle QPS \cong \angle TPR$ Prove $\angle QPR \cong \angle TPS$ 

Statement

Reason

a. $\angle QPS \cong \angle TPR$

a. GIVEN

b. $m\angle QPS = m\angle TPR$

b. Def'n of $\cong \angle$ s

c. $m\angle QPS = m\angle QPR + m\angle RPS$
 $m\angle TPR = m\angle TPS + m\angle RPS$

c. Angle Add'n Postulate

d. $m\angle QPR + m\angle RPS = m\angle TPS + m\angle RPS$

d. Substitution Property of Equality

e. $m\angle QPR = m\angle TPS$

e. Subtraction P.O.E

f. $\angle QPR \cong \angle TPS$

f. Def'n of $\cong \angle$ s

Reasoning and Proof – Proving Angles

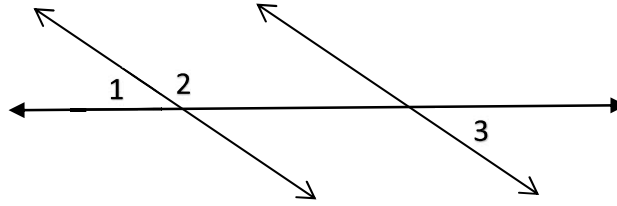
Application Section 2.4

Name _____

2.

Given $\angle 1$ and $\angle 2$ form a linear pair
 $\angle 2$ and $\angle 3$ are supplementary

Prove $\angle 1 \cong \angle 3$



Statement	Reason
a. $\angle 1$ and $\angle 2$ form a linear pair $\angle 2$ and $\angle 3$ are supplementary	a. GIVEN
b. $\angle 1$ and $\angle 2$ are supplementary	b. Supplement Theorem
c. $\angle 1 \cong \angle 3$	c. Angles Supplementary to the Same angle are congruent
d.	d.
e.	e.
f.	f.
g.	g.
h.	h.