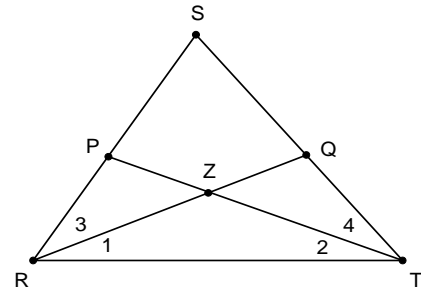


Name \_\_\_\_\_ Block \_\_\_\_\_

Proofs 6

- 1) Given:  $m\angle 1 = m\angle 2$   
 $m\angle 3 = m\angle 4$

Prove:  $m\angle SRT = m\angle STR$



Statements	Reasons
1) $m\angle 1 = m\angle 2$ $m\angle 3 = m\angle 4$	1)
2) $m\angle 1 + m\angle 3 = m\angle 2 + m\angle 4$	2)
3) $m\angle SRT = m\angle 1 + m\angle 3$ $m\angle STR = m\angle 2 + m\angle 4$	3)
4) $m\angle SRT = m\angle STR$	4)

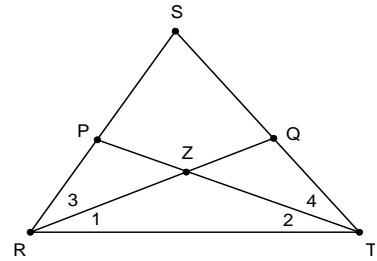
- 2) Given:  $RP = TQ$   
 $PS = QS$

Prove:  $RS = TS$

Statements	Reasons
1)	1) Given
2) $RP + PS = TQ + QS$	2)
3) $RS = RP + PS$ $TS = TQ + QS$	3)
4)	4) Substitution Property

- 3) Given:  $RQ = TP$   
 $ZQ = ZP$

Prove:  $RZ = TZ$



Statements	Reasons
1) $RQ = TP$	1)
2) $RQ = RZ + ZQ$ $TP = TZ + ZP$	2)
3) $RZ + ZQ = TZ + ZP$	3)
4) $ZQ = ZP$	4)
5) $RZ = TZ$	5)

- 4) Given:  $m\angle SRT = m\angle STR$   
 $m\angle 3 = m\angle 4$

Prove:  $m\angle 1 = m\angle 2$

Statements	Reasons
1) $m\angle SRT = m\angle STR$	1)
2)	2) Angle Addition Postulate
3) $m\angle 1 + m\angle 3 = m\angle 2 + m\angle 4$	3)
4) $m\angle 3 = m\angle 4$	4)
5)	5) Subtraction Property