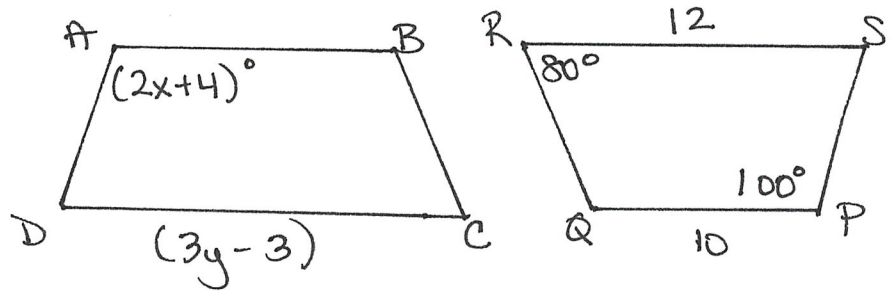


Proofs with Congruent Figures

Objective: Use the definition of congruent polygons to find missing measures.

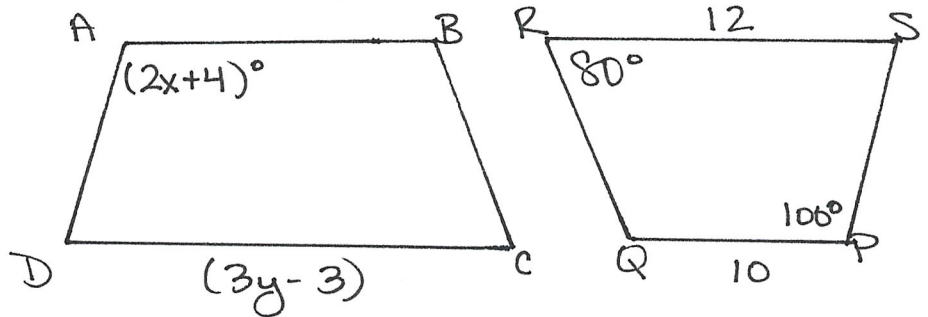
1) Given: Polygon $ABCD \cong$ polygon $PQRS$.

Prove: $y = 5$



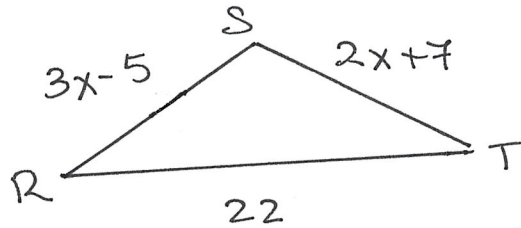
2) Given: Polygon $ABCD \cong$ polygon $PQRS$.

Prove: $x = 48$

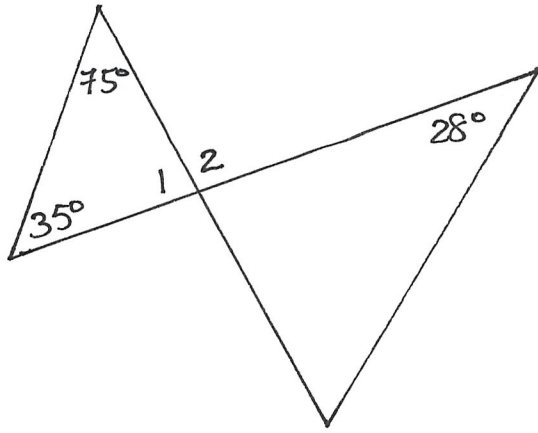


- 3) Given: $\triangle SRT$ is an isosceles triangle,
with $\overline{SR} \cong \overline{RT}$

Prove: $RS = 31$



4)



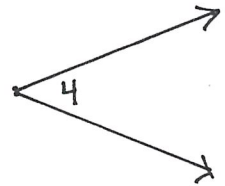
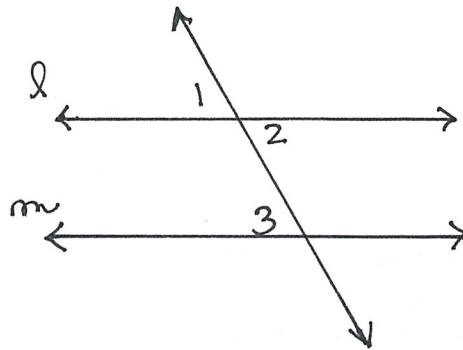
Prove: $m\angle 2 = 110^\circ$

Proofs with Parallel Lines (Review)

Objective: Use properties of parallel lines and congruent angles to complete proofs.

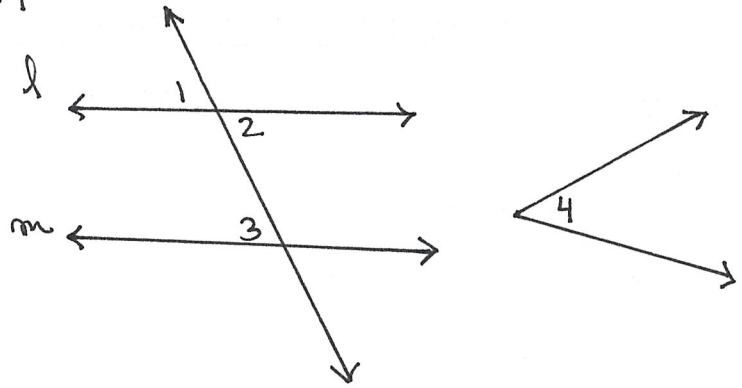
5) Given: $l \parallel m$; $\angle 2 \cong \angle 4$

Prove: $\angle 4 \cong \angle 3$



6) Given: $l \parallel m$; $\angle 1 \cong \angle 4$

Prove: $\angle 3 \cong \angle 4$



7) Given: $l \parallel n$

Prove: $m\angle 3 + m\angle 6 = 180$

