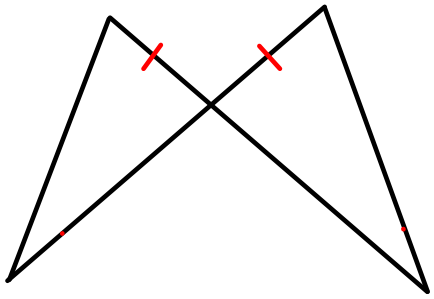
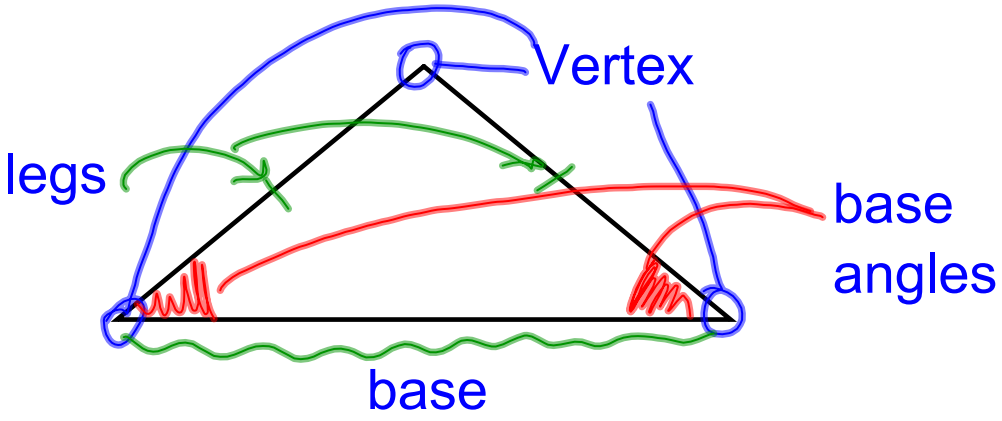
Exit Ticket:

What can be used to prove the triangles are congruent? Give a congruence statement.

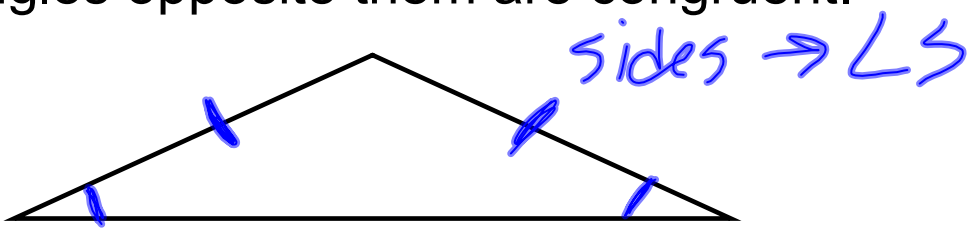


Chapter 4.7: Use Isosceles and Equilateral Triangles



Base Angles Theorem:

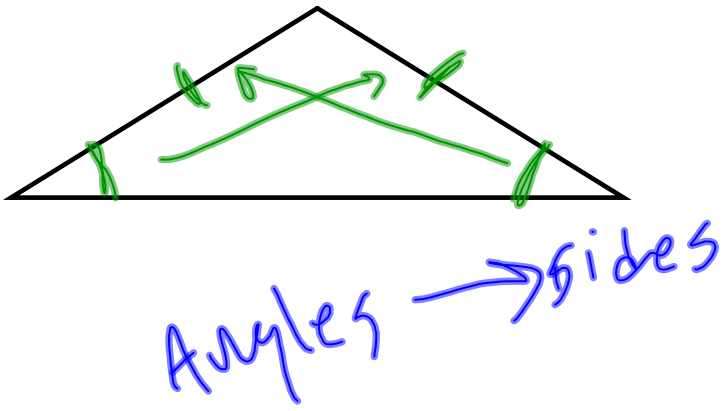
If two sides of a triangle are congruent, then the angles opposite them are congruent.



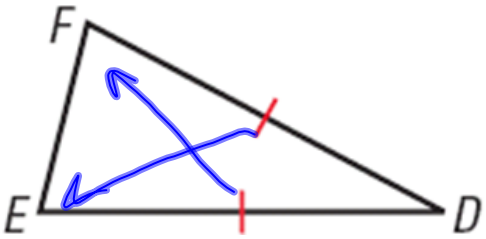
proof to come.....

Converse of Base Angles Theorem

If two angles of a triangles are congruent, then the sides opposite them are congruent.



Name two angles that are the same.

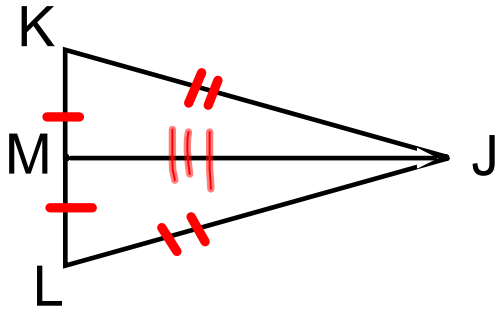


$\angle DFE \cong \angle DEF$
Base $\angle$ Thm

Base Angles Proof:

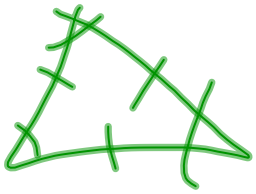
Given: $\overline{JK} \cong \overline{JL}$

Prove: $\angle K \cong \angle L$



Corollary to the Base Angles Theorem:

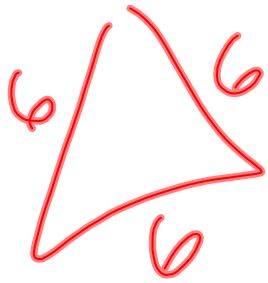
If a triangle is equilateral, then it is equiangular.

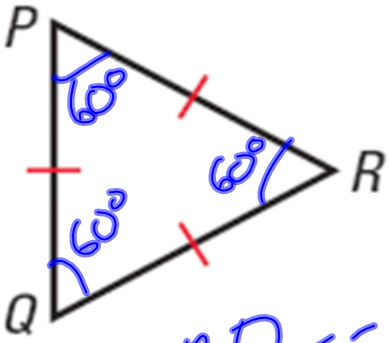


Corollary to the Converse of Base Angles Theorem:

If a triangle is equiangular, then it is equilateral.

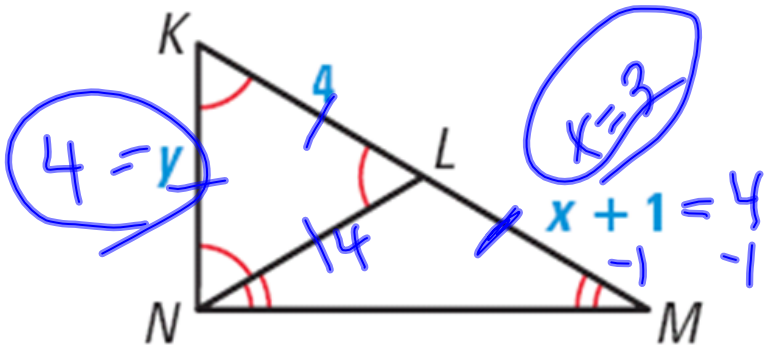
Find the measures of <P, <Q, <R



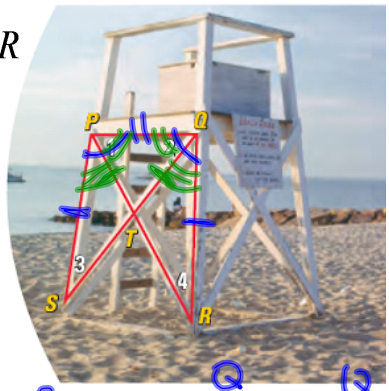


$\frac{180}{3} = 60°$

Find the values of x and y.



Given: $\overline{PS} \cong \overline{QR}, \angle QPS \cong \angle PQR$



What can you use to prove

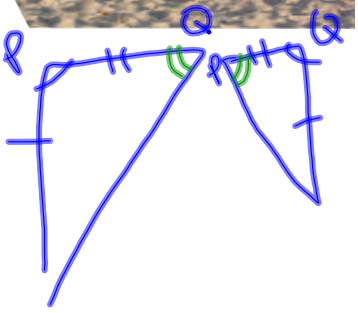
$\Delta QPS \cong \Delta PQR$

Reflexive, SAS

Why is ΔPQT isosceles

2 ∠'s & 2 sides ≅

Show $\Delta PTS \cong \Delta QTR$



Homework: Ch 4.7 pg. 267
#'s 4-12e,16,24,38,48