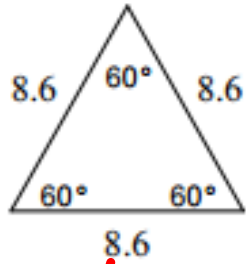
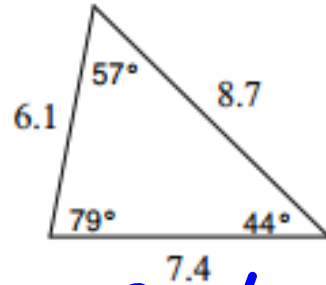


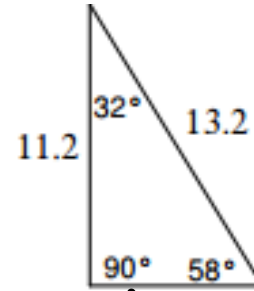
Board Review with answers



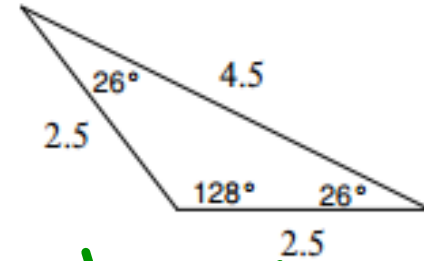
equilateral
equiangular



scalene
acute



scalene
right



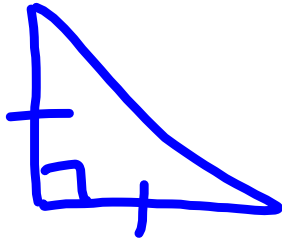
Isosceles
obtuse

CLASSIFY BY
of \cong Sides.

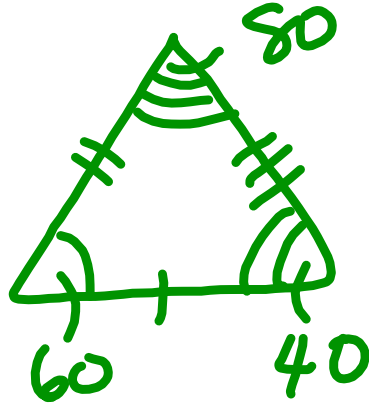
Board Review with answers

Sketch your own triangle based on the classification provided. Be sure to mark anything necessary to prove the triangle is drawn correctly.

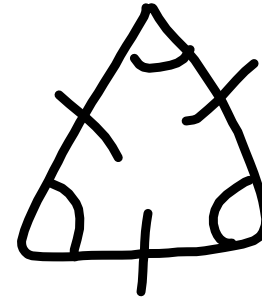
Right, Isosceles



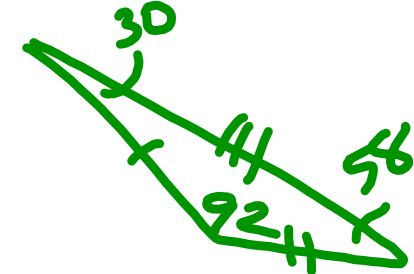
Acute, Scalene



Equilateral, Equiangular

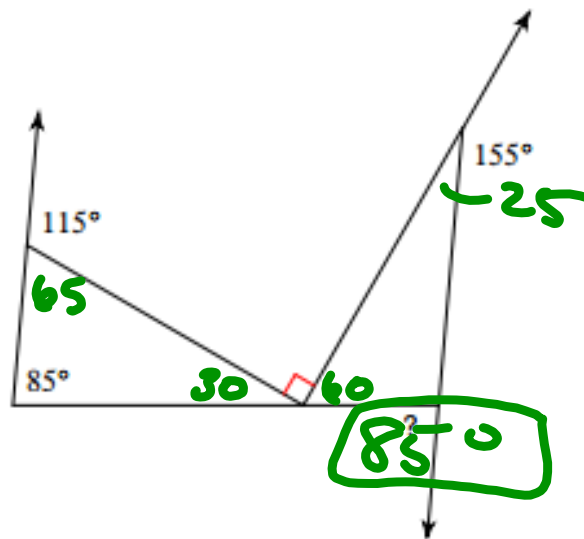
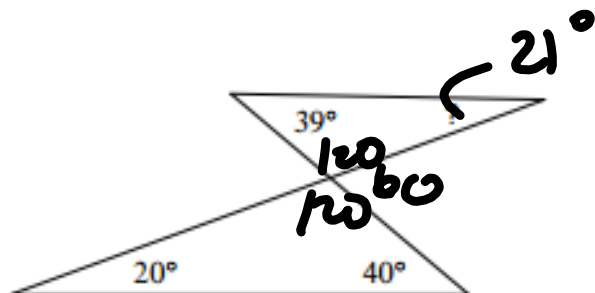
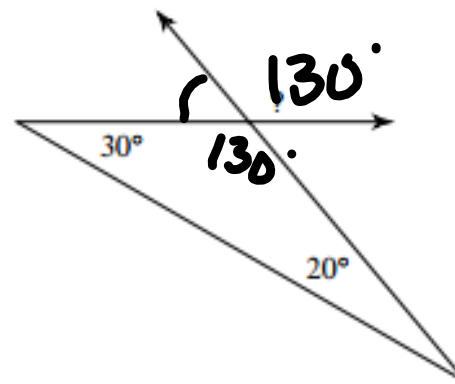
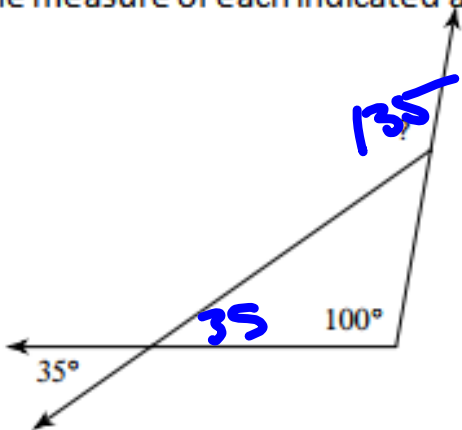
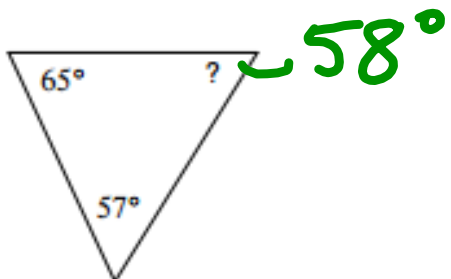


Obtuse, Scalene



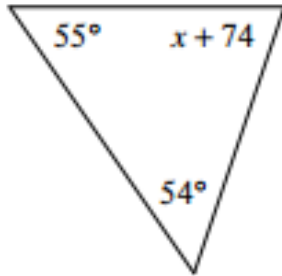
Board Review with answers

Triangle Sum Theorem: Find the measure of each indicated angle.



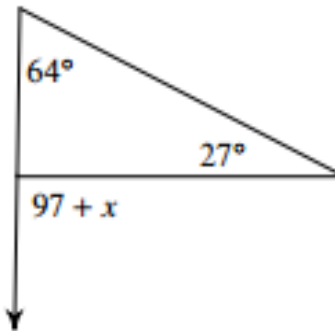
Board Review with answers

Solve for x.



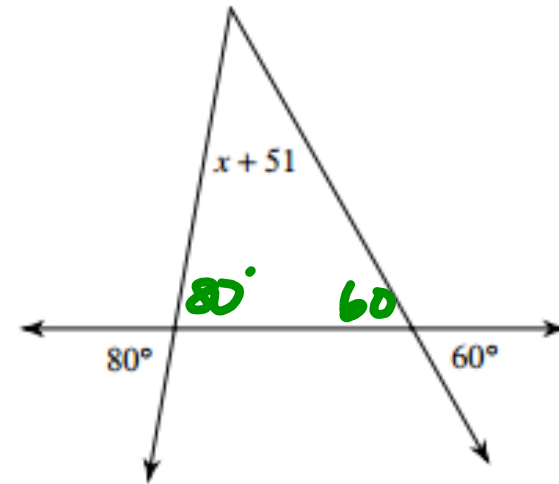
$$55 + 54 + x + 74 = 180$$

$$x = -3$$



$$64 + 27 = 97 + x$$

$$x = -6$$

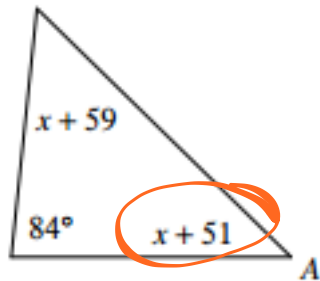


$$x + 51 + 80 + 60 = 180$$

$$x = -11$$

Board Review with answers

Find the measure of angle A.

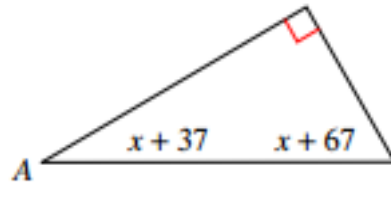


$$84 + x + 51 + x + 59 = 180$$

$$x = -7$$

$$-7 + 51 = 44$$

$$m\angle A = 44^\circ$$

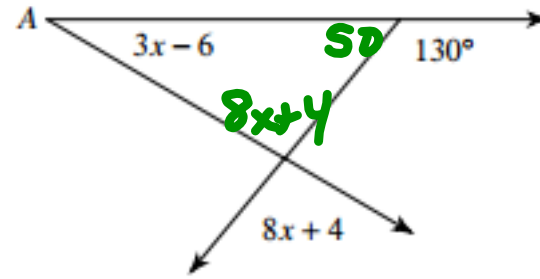


$$x + 37 + x + 67 = 90$$

$$x = -7$$

$$-7 + 37 = 30$$

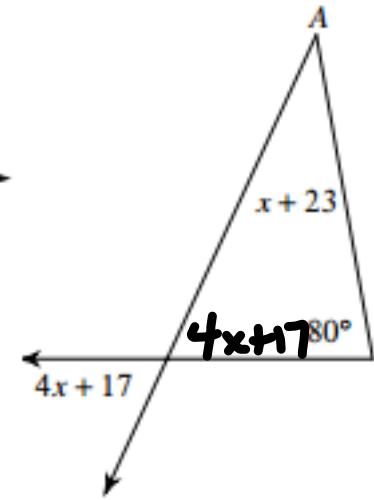
$$m\angle A = 30^\circ$$



$$130 = 3x - 6 + 8x + 4$$

$$x = 12$$

$$m\angle A = 30^\circ$$



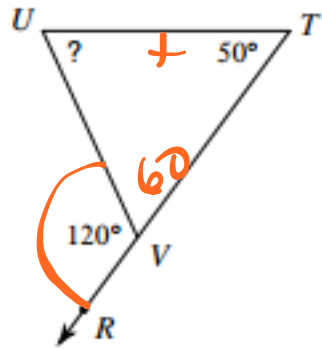
$$x + 23 + 4x + 17 + 80 = 180$$

$$x = 12$$

$$m\angle A = 35^\circ$$

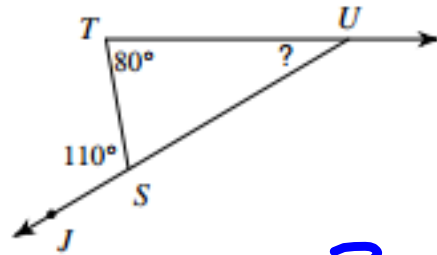
Board Review with answers

Find the measure of the indicated angle.



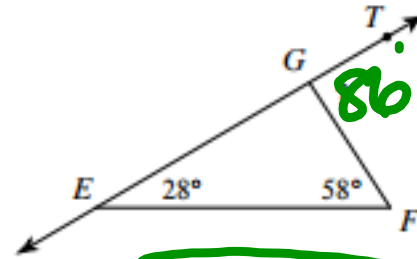
$$120 = U + 50$$

$$\boxed{70^\circ}$$

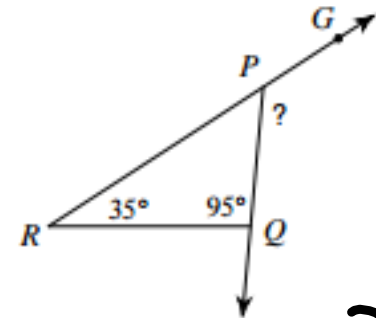


$$110 = 80 + ?$$

$$\boxed{? = 30^\circ}$$



$$\boxed{? = 86^\circ}$$

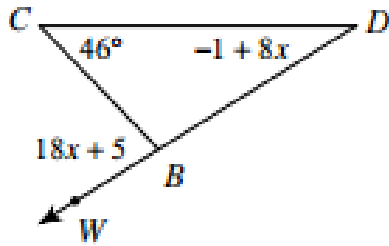


$$35 + 95 = ?$$

$$\boxed{130^\circ = ?}$$

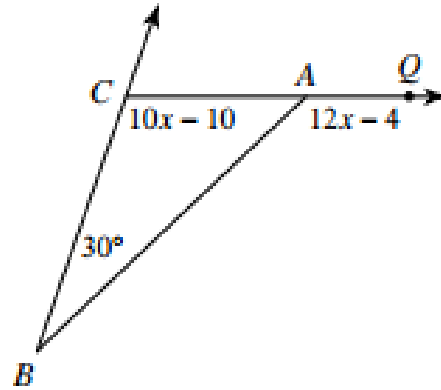
Board Review with answers

Solve for x.



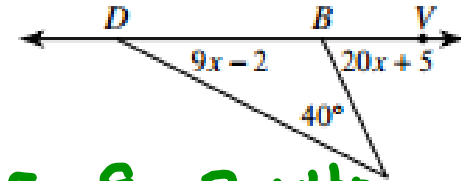
$$18x + 5 = 46 + 8x - 1$$

$$\boxed{x = 4}$$



$$30 + 10x - 10 = 12x - 4$$

$$\boxed{x = 12}$$



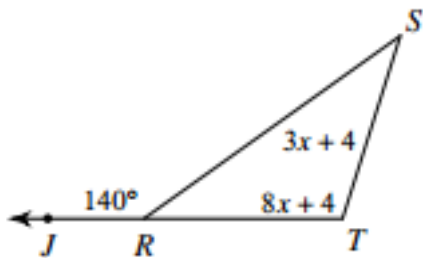
$$20x + 5 = 9x - 2 + 40$$

$$\boxed{x = 3}$$

Board Review with answers

Find the measure of the indicated angle.

Find $m\angle S$.

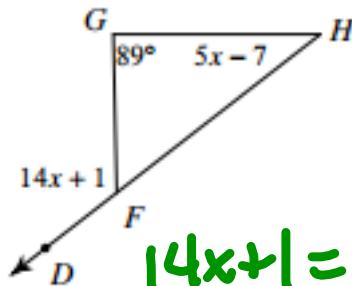


$$140 = 3x + 4 + 8x + 4$$

$$x = 12$$

$$3(12) + 4 = 40^\circ$$

Find $m\angle H$.

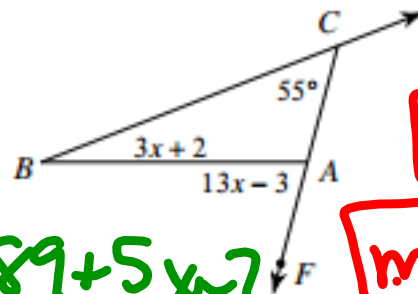


$$14x + 1 = 89 + 5x - 7$$

$$x = 9$$

$$m\angle H = 38^\circ$$

Find $m\angle FAB$.



$$13x - 3 = 55 + 3x + 2$$

$$x = 6$$

$$13(6) - 3 = 75^\circ$$

Find $m\angle YDC$.

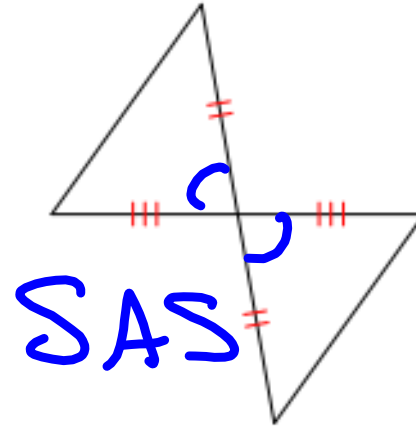
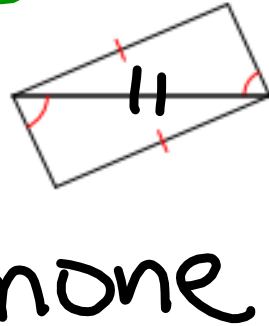
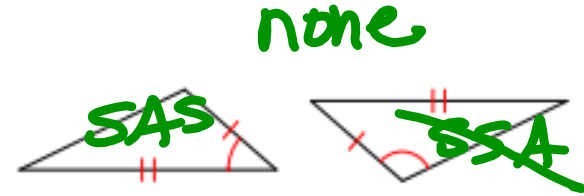
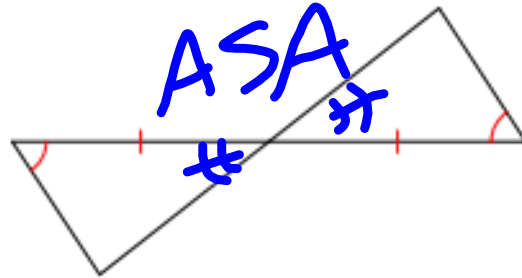
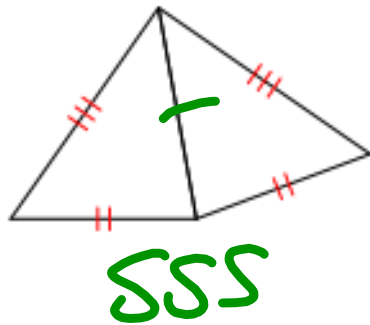
$$15x + 5 = 80 + 6x + 6$$

$$x = 9$$

$$m\angle YDC = 140^\circ$$

Board Review with answers

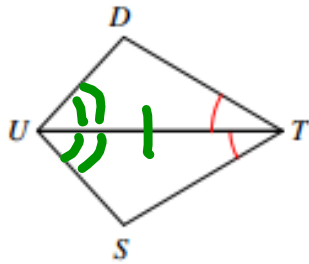
State if the two triangles are congruent. If they are congruent, state how they are congruent. Be sure to make any arc marks and tic marks that are missing.



Board Review with answers

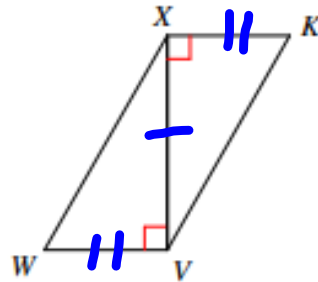
State the additional information needed to prove the triangles congruent by the given postulate/theorem. Then state the congruence statement.

ASA



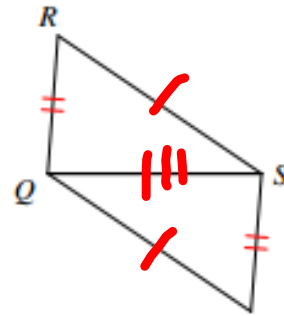
$\angle DUT \cong \angle TUS$
 $\angle TUS \cong \angle DUT$
 $\overline{UT} \cong \overline{UT}$
 $\triangle SUT \cong \triangle DUT$

SAS



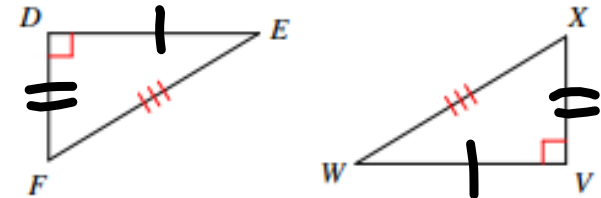
$\overline{VX} \cong \overline{VX}$
 $\overline{XK} \cong \overline{VW}$
 $\triangle WVX \cong \triangle KXV$

SSS



$\overline{RS} \cong \overline{QD}$
 $\overline{QS} \cong \overline{QS}$
 $\triangle RQS \cong \triangle DSQ$

HL

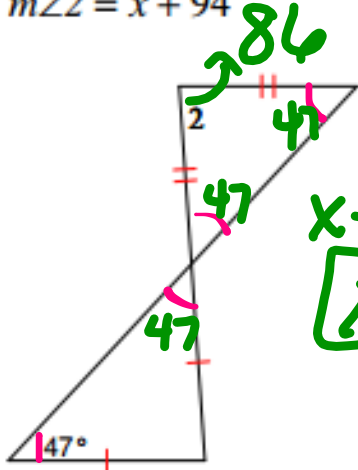


$\overline{DE} \cong \overline{WX}$
 $\overline{DF} \cong \overline{VX}$
 $\triangle DEF \cong \triangle VWX$

Board Review with answers

Find the value of x.

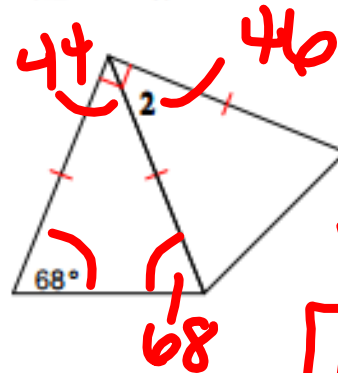
$$m\angle 2 = x + 94$$



$$x + 94 = 86$$

$$\boxed{x = -8}$$

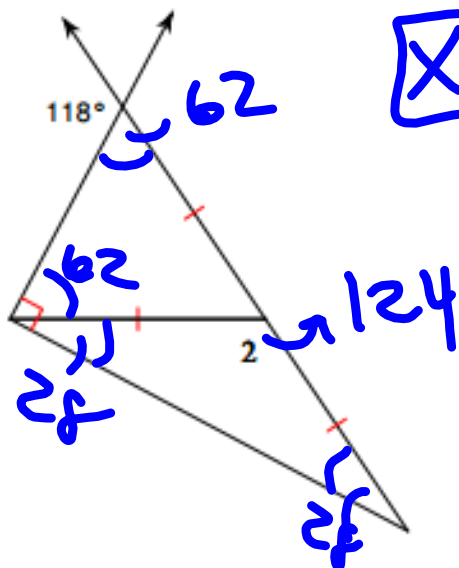
$$m\angle 2 = 4x - 2$$



$$46 = 4x - 2$$

$$\boxed{12 = x}$$

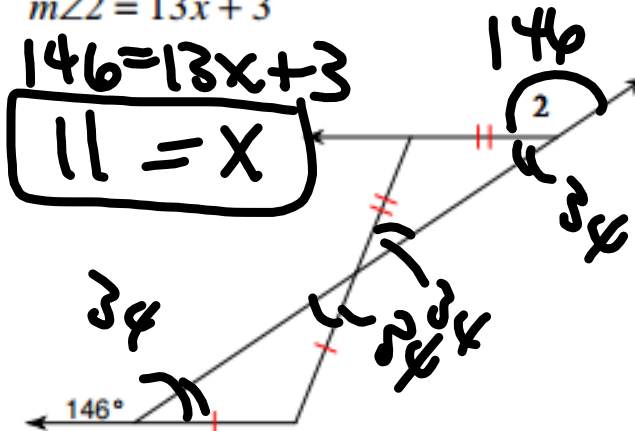
$$m\angle 2 = 12x + 4$$



$$12x + 4 = 124$$

$$\boxed{x = 10}$$

$$m\angle 2 = 13x + 3$$



$$146 = 13x + 3$$

$$\boxed{11 = x}$$

Make sure you also know PROOFS
and Constructions