

10-15-19 6th Geo

Classifying Triangles

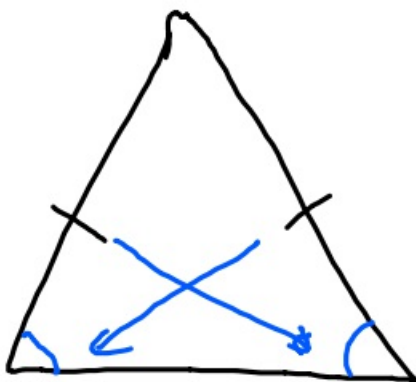
Side length



Scalene

No sides are equal in length

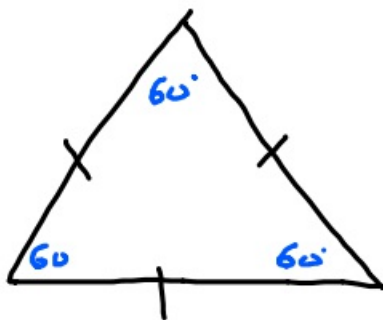
\therefore No angles are $=$.



Isosceles

Two sides are = in length

2 angles across from = sides are =.



Equilateral

All sides are = in length

All angles are 60° .

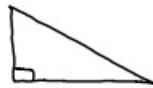
Angles



Obtuse - 1 angle
is over 90° .

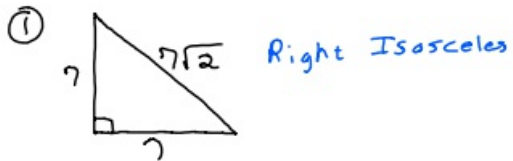


Acute - all angles
less than 90°

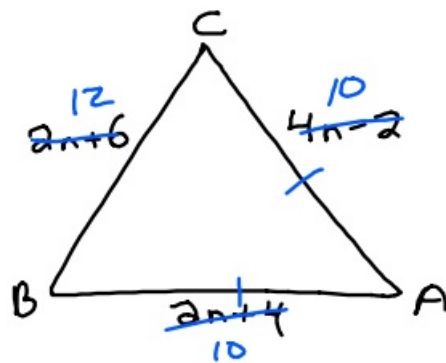


Right - one angle is 90°

Classify the given triangles.

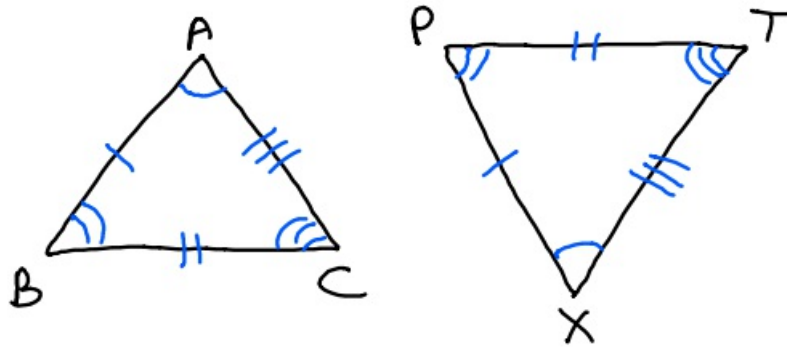


- ⑤ $\overline{AB} \cong \overline{AC}$ in $\triangle ABC$.
Find each side length.



$$4n-2 = 2n+4$$

$$n=3$$



$$\triangle ABC \cong \triangle XPT$$

$$\triangle ABC \cong \triangle XYZ$$

with $AB=8$, $BC=10$, $AC=11$

If $XY=2n$, what is n ?

$$2n=8$$

$$n=4$$