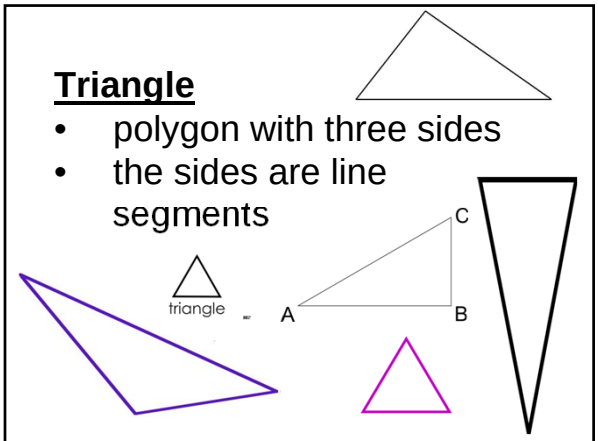
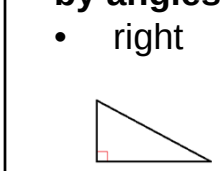
Triangle

- polygon with three sides
- the sides are line segments



Triangles can be classified by angles

- right



Triangles can be classified by angles

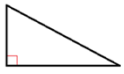
- obtuse

Triangles can be classified by angles

- acute

Triangles can be classified by angles

- right

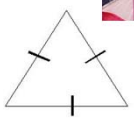


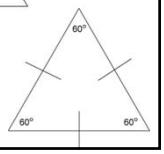
- obtuse

- acute

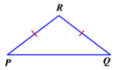
Triangles can be classified by sides

- equilateral

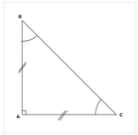


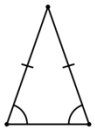


Triangles can be classified by sides

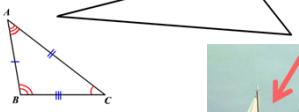


- isosceles





Triangles can be classified by sides

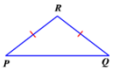


- scalene

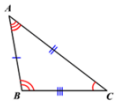
Triangles can be classified by sides

- equilateral

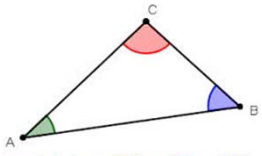
- isosceles



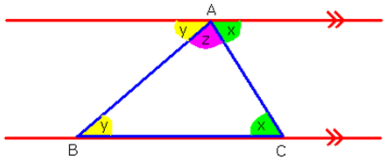
- scalene



- **The sum of the angles in a triangle is 180º.**



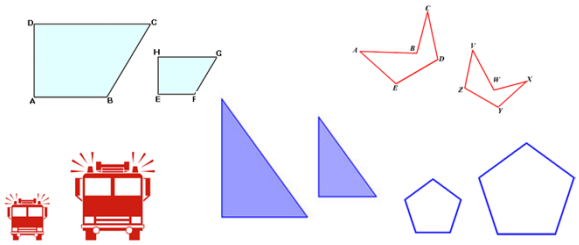
$m\angle A + m\angle B + m\angle C = 180$



- So, if you know two angles of a triangle, you can subtract from 180 to find the third.

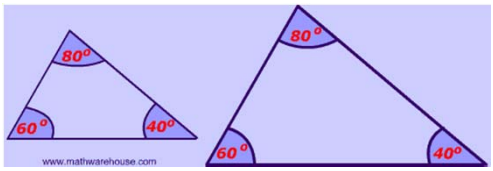
Similar Figures

- Same shape, but different sizes.



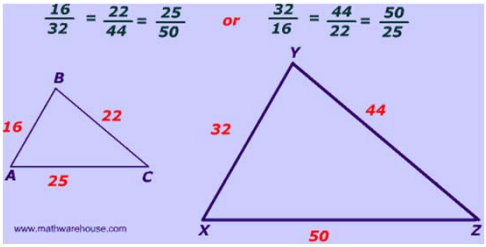
In similar figures

- Corresponding angles are congruent (have the same measure)



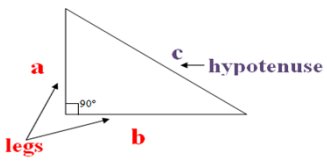
In similar figures

- Corresponding sides are **proportional**.



Pythagorean theorem

In a right triangle, the square of the hypotenuse equals the sum of the squares of the legs.



$a^2 + b^2 = c^2$

The scarecrow in *The Wizard of Oz* got it wrong:

Pythagorean theorem