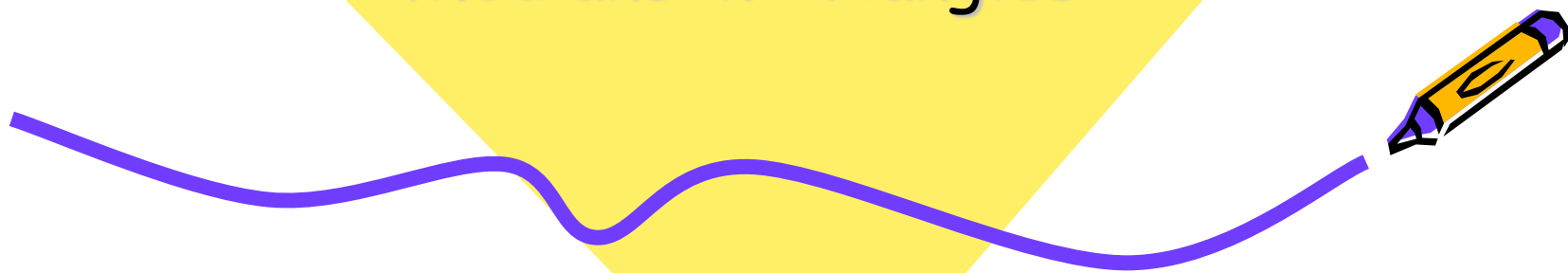


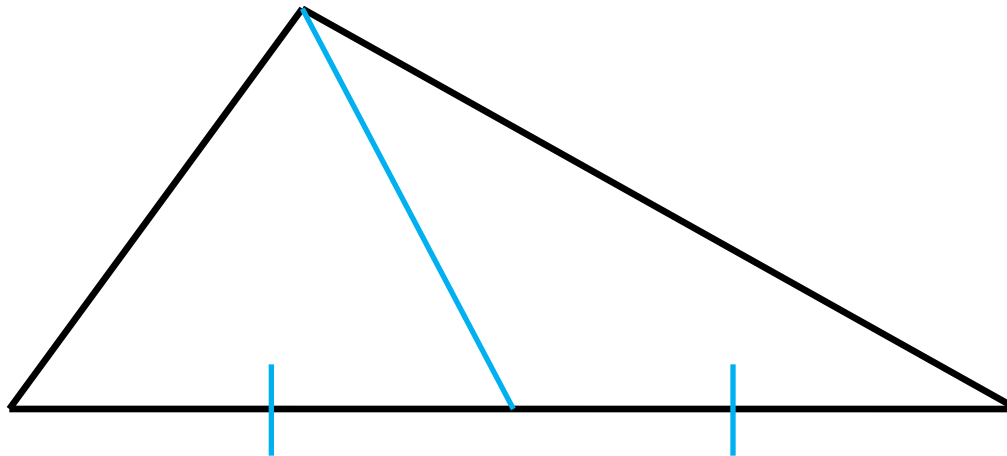
# Geometry

## Medians in Triangles

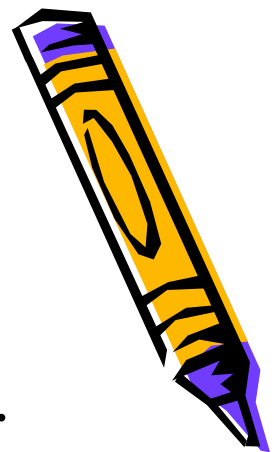


# Median

A segment that goes from the vertex of a triangle to the midpoint of the opposite side.



A triangle could have up to 3 medians.



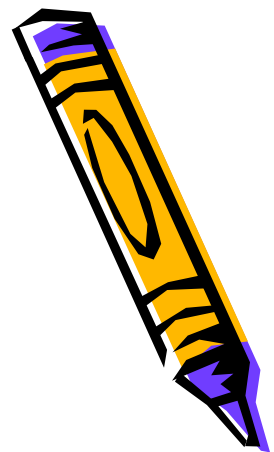
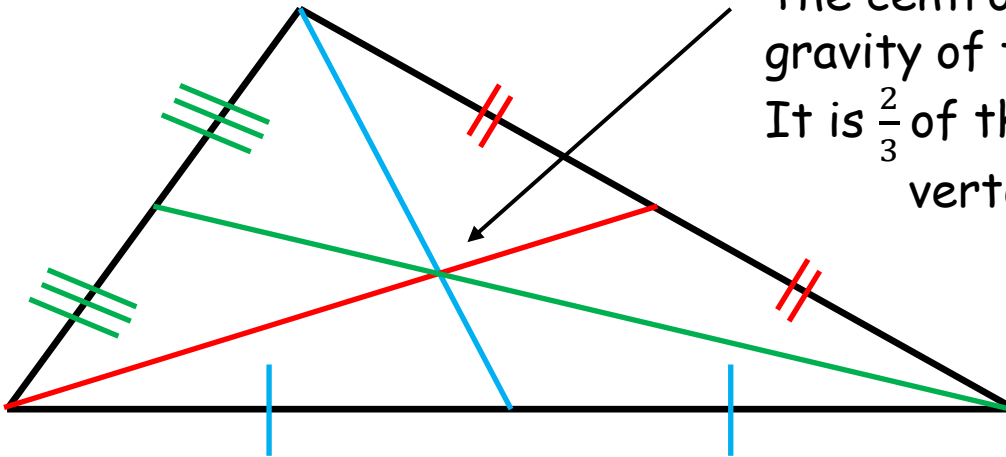
# Median

A triangle could have up to 3 medians. They will intersect at the center of the triangle.

The point of concurrency is called the centroid.

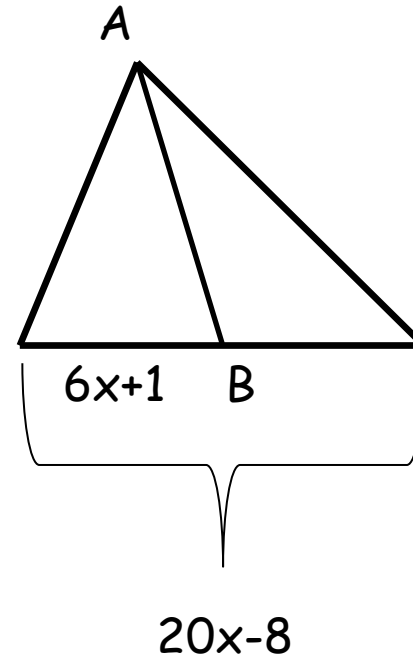
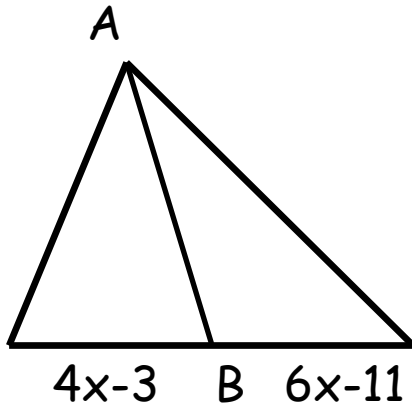
The centroid is the center of gravity of the triangle.

It is  $\frac{2}{3}$  of the distance from vertex to midpoint.



# Practice

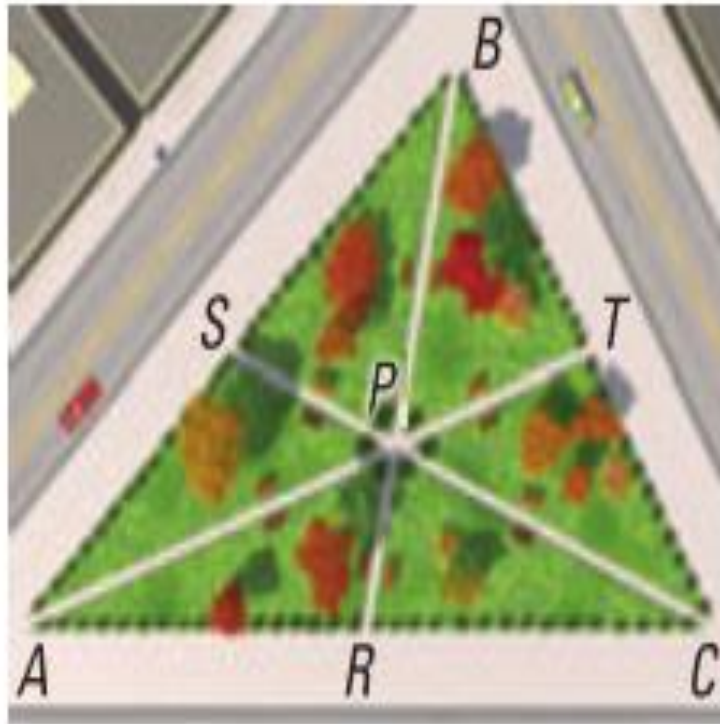
$\overline{AB}$  is a median. Find  $x$ .



# Practice

There are three paths through a triangular park. Each path goes from the midpoint of one edge to the opposite corner. The paths meet at point  $P$ .

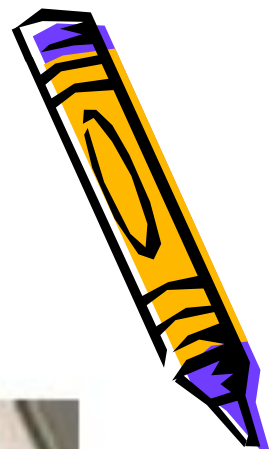
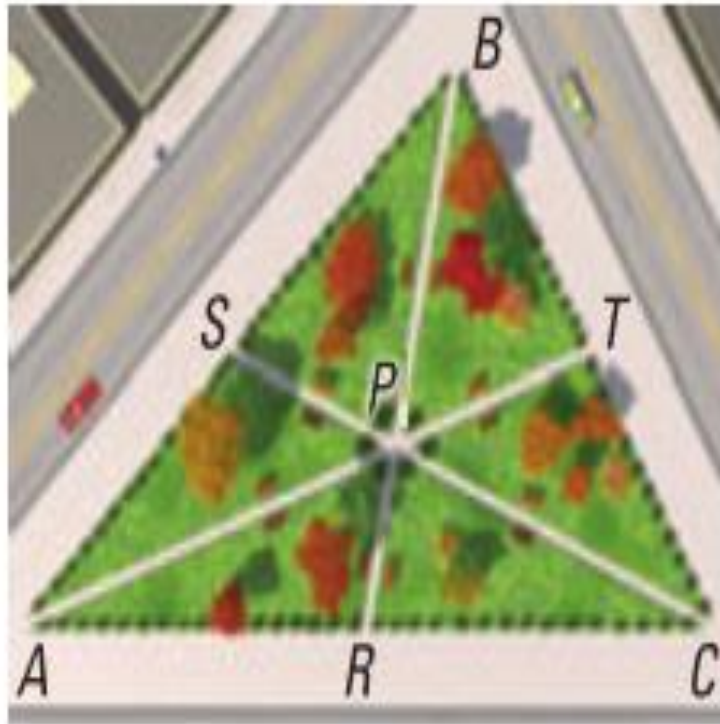
If  $SC=2100$  feet, find  $PS$  and  $PC$ .



# Practice

There are three paths through a triangular park. Each path goes from the midpoint of one edge to the opposite corner. The paths meet at point  $P$ .

If  $PT=800$  feet, find  $PA$  and  $TA$ .



# Practice

Triangle ABC has points,

$A(-2, 6)$

$B(3, 0)$

$C(-3, -4)$

$\overline{AD}$  is a median.

Find the ordered pair for D.

