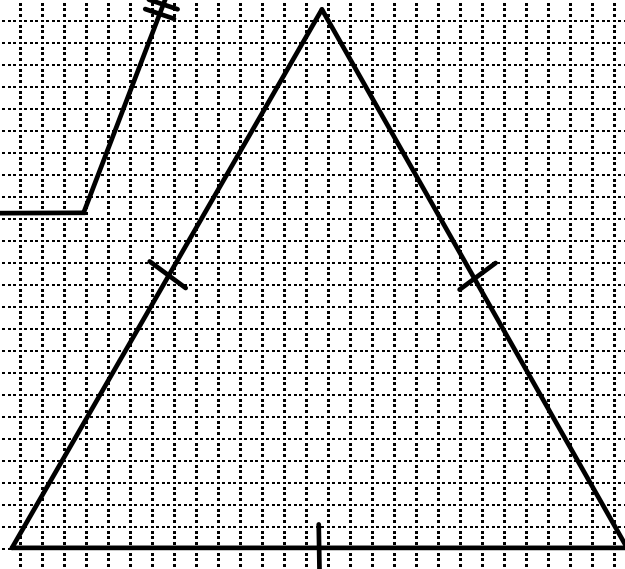
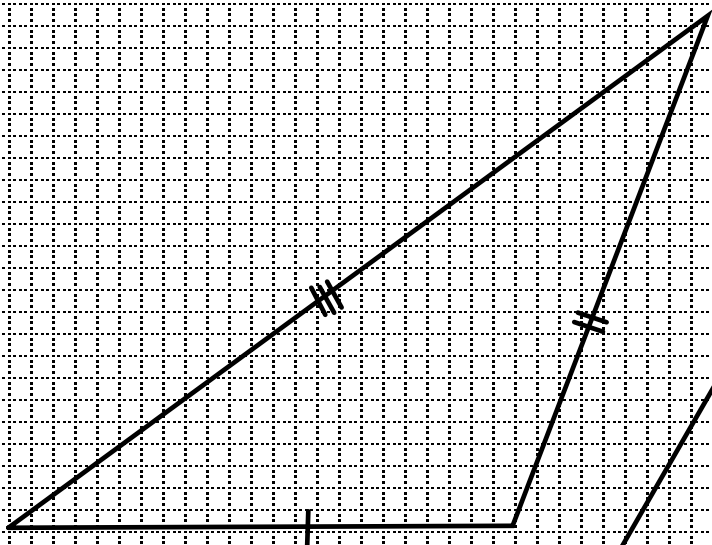
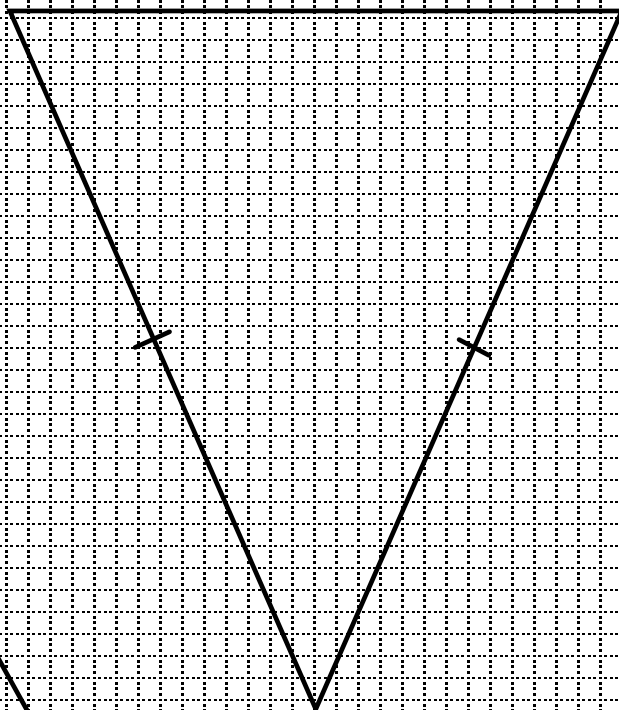
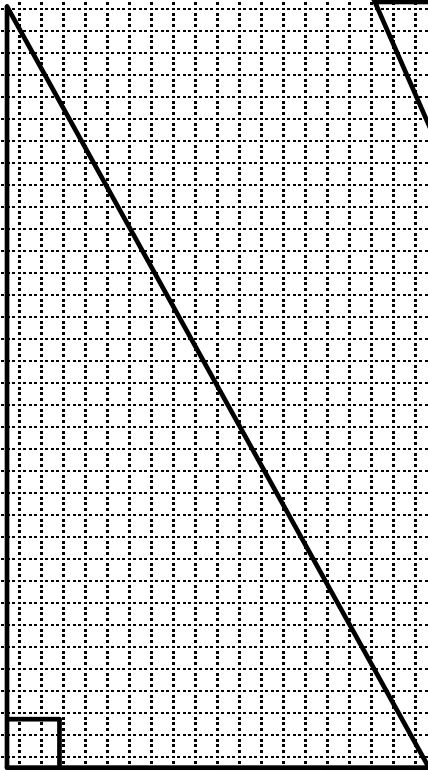


Medians



2.7 Summary of Findings

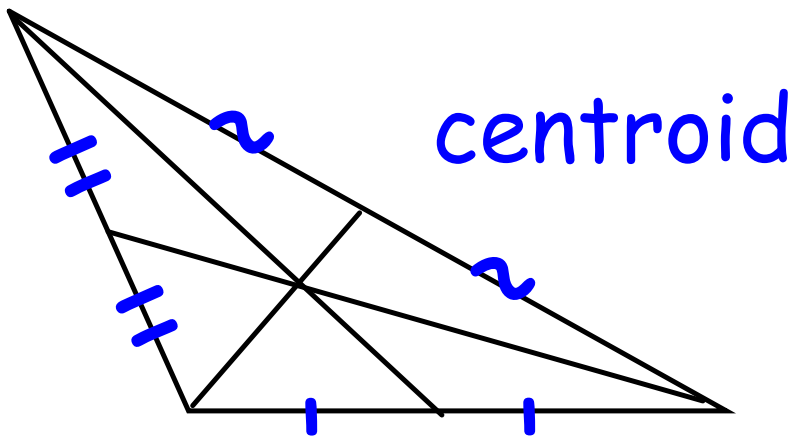
MEDIANS

1. The medians of any triangle are _____.

The POI of the medians is the _____.

The medians bisect each other in a _____ ratio.

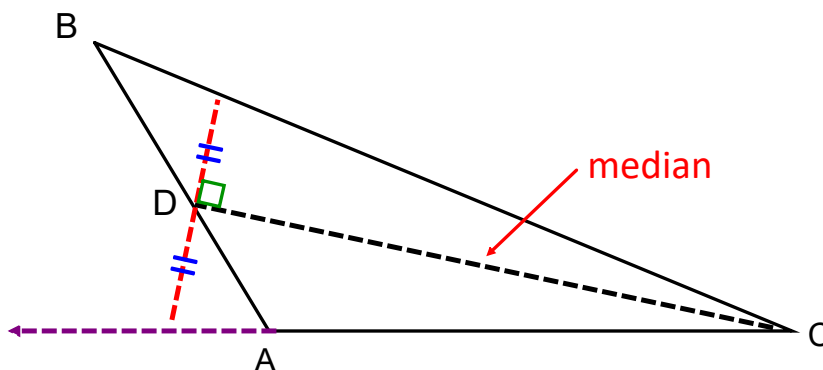
The centroid is the _____ of the triangle.



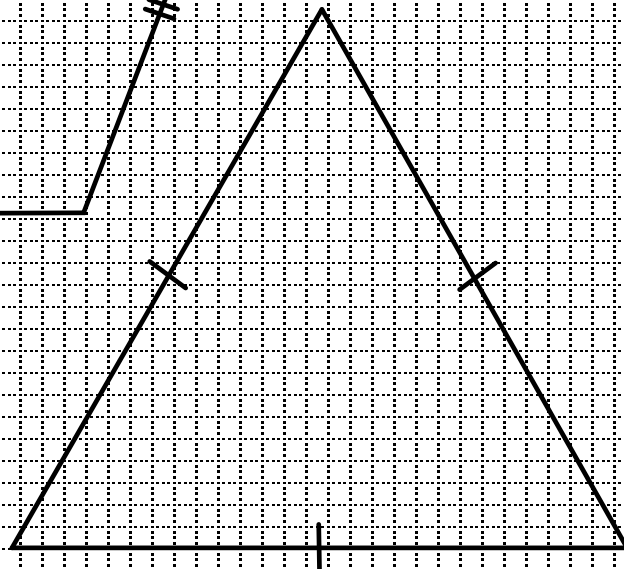
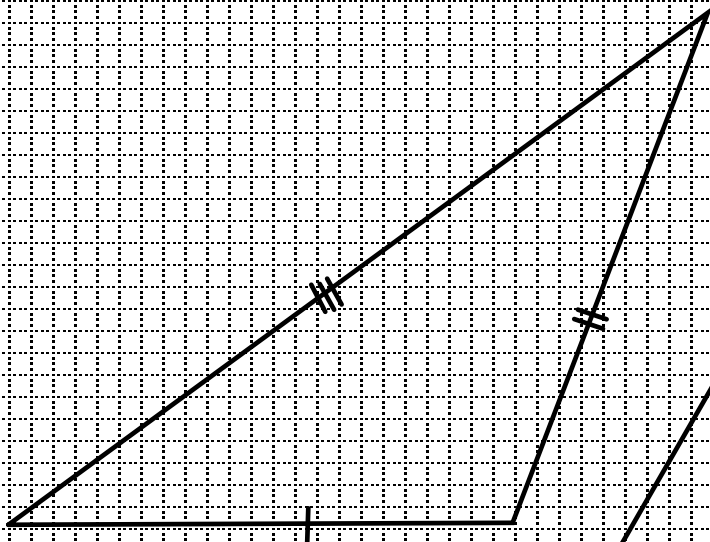
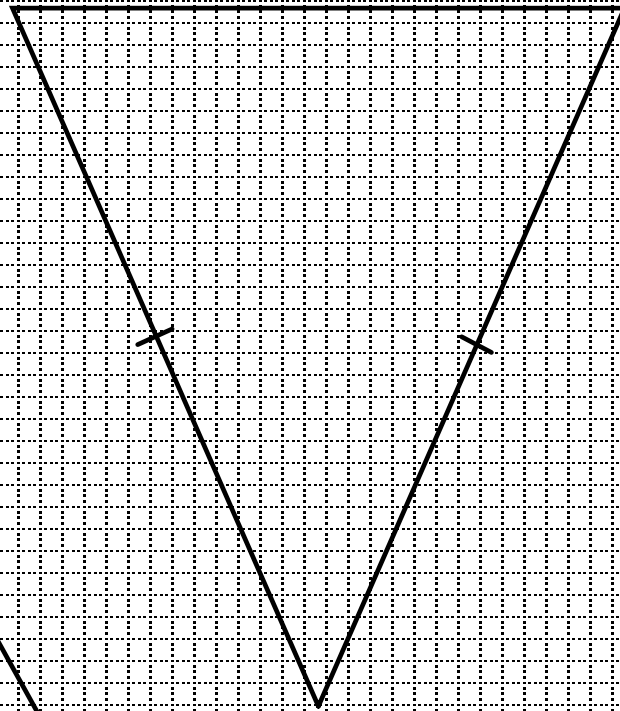
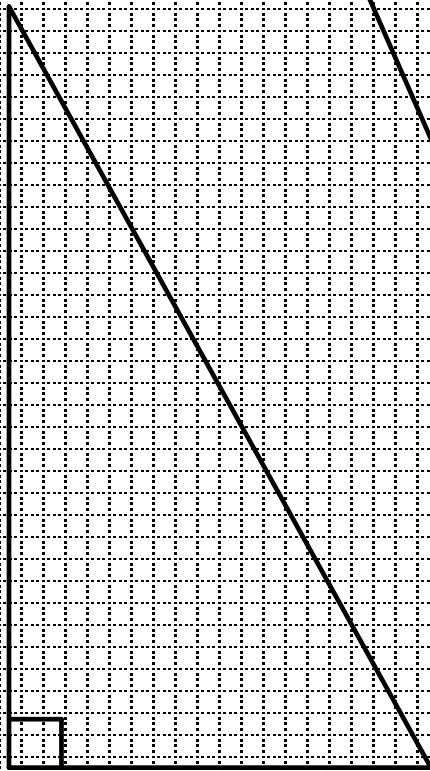
The centroid is the average of the vertices.

2. A median creates 2 triangles with equal _____.

When the median is used as the base of each triangle, the _____ are equal.



Investigating Perpendicular Bisectors

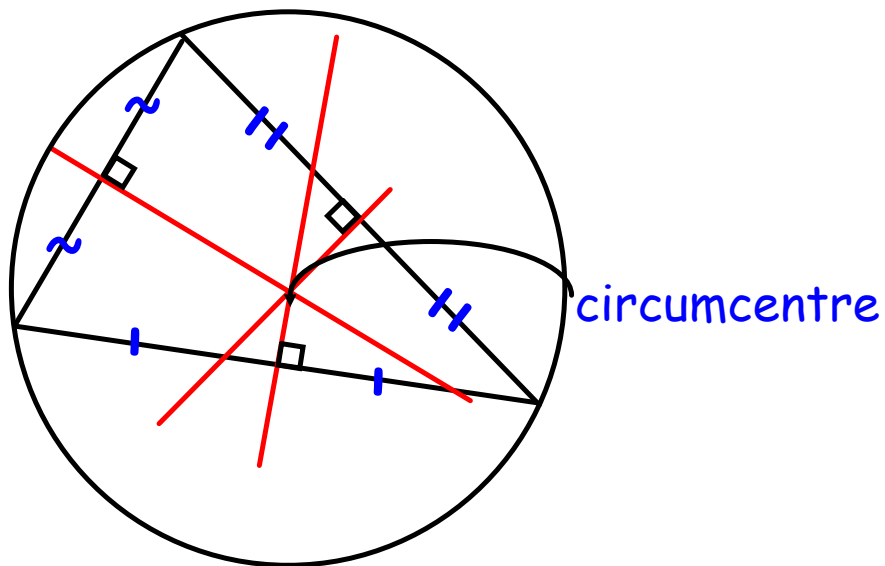


PERPENDICULAR BISECTORS

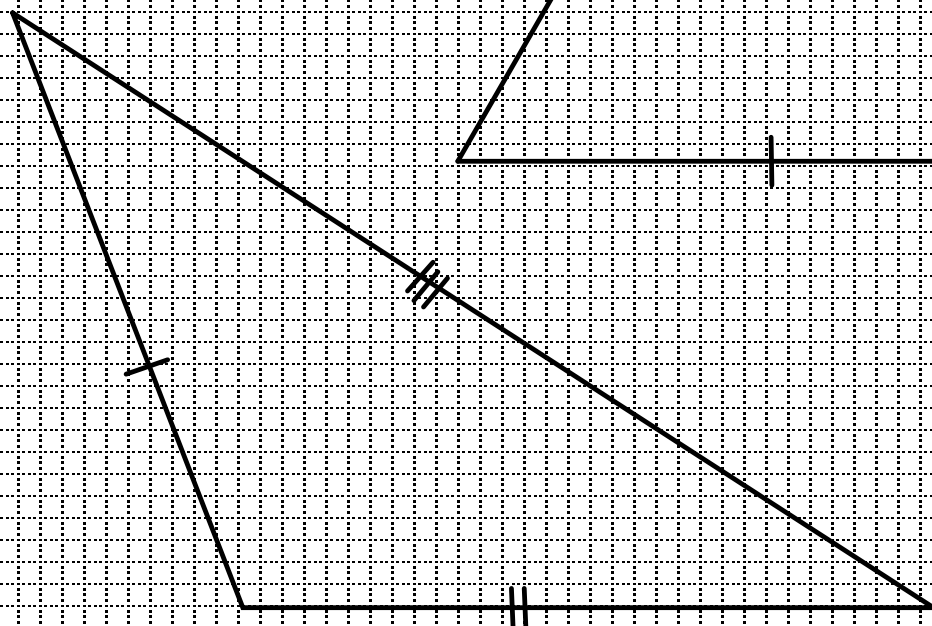
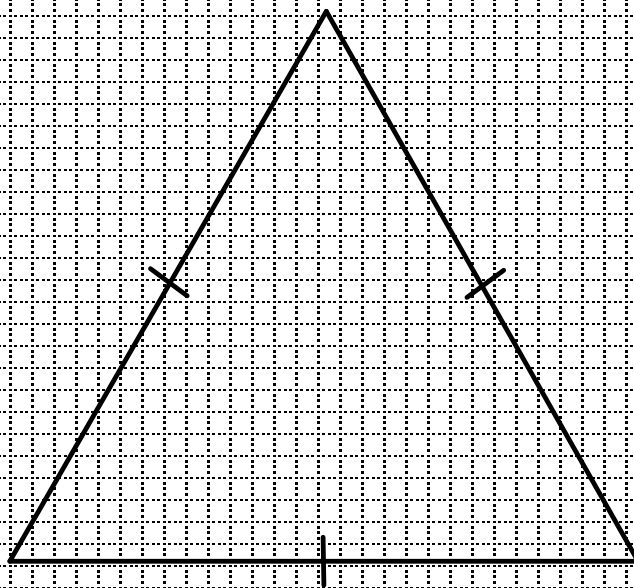
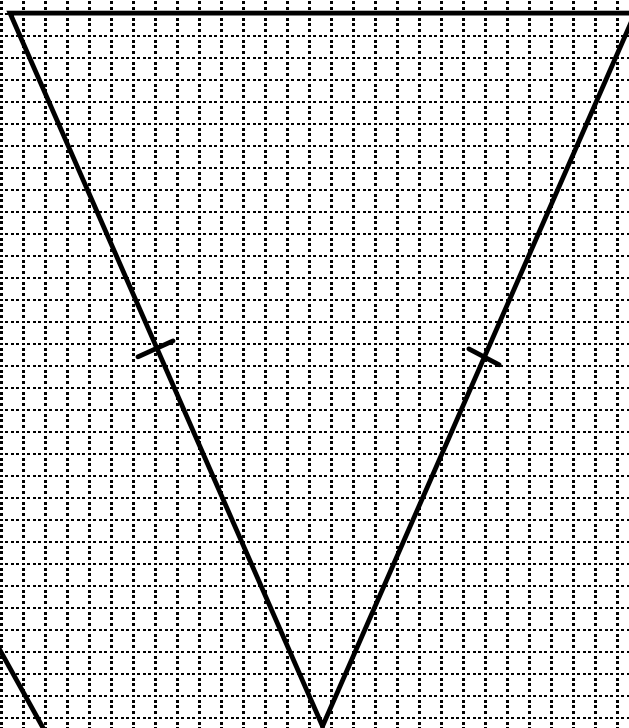
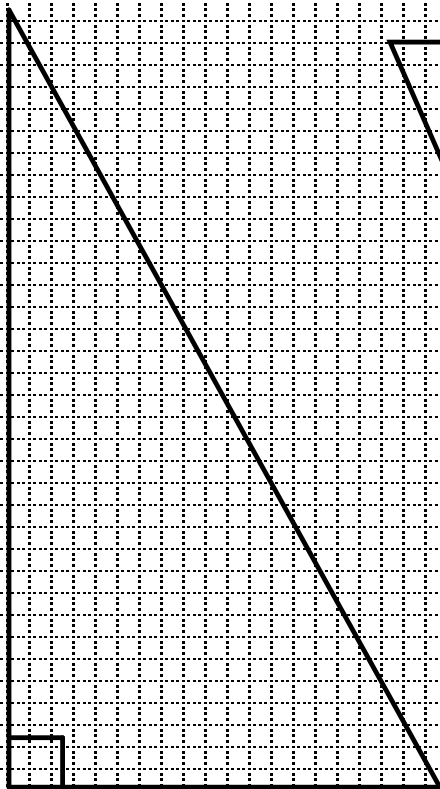
5. The perpendicular bisectors intersect at the _____.

The circumcentre is the _____ of the circle that contains all 3 _____ of the triangle.

The circumcentre is the same _____ from each vertex.

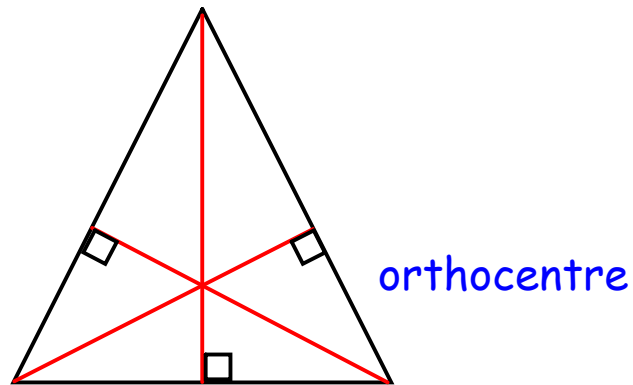


Investigating Altitudes



ALTITUDES

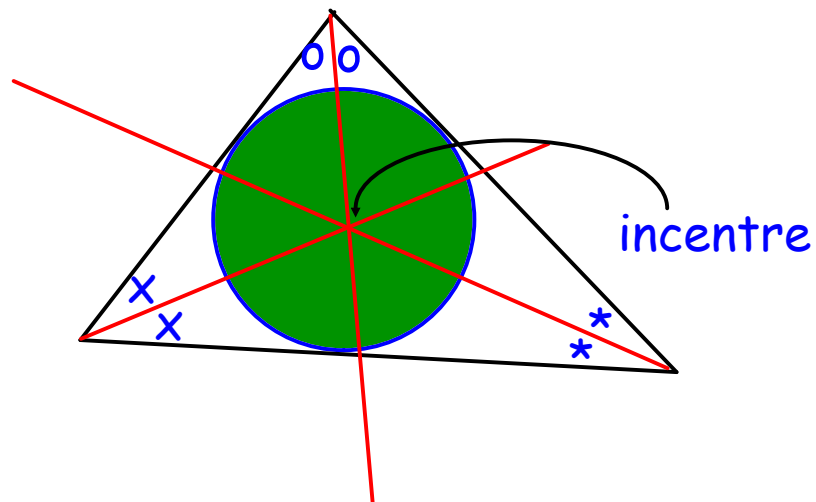
3. The altitudes of a triangle intersect at the _____.



ANGLE BISECTORS

4. The angle bisectors of a triangle intersect at the _____.

The incentre is the _____ of the largest
_____ that can be drawn _____
the triangle.



Did you discover anything else?

- What happens in right triangles?
- What happens in isosceles triangles?
- What happens in equilateral triangles?
- What happens in obtuse triangles?

Attachments

2.7 Centroid.gsp

2.7 Median makes 2 smaller triangles.gsp

2.7 Orthocentre.gsp

2.7 Circumcentre.gsp

2.7 Incentre.gsp