Problem 1 – Angle Bisectors & the Incenter

1. What appears to be true about the three angle bisectors of the triangle?

2. In relation to the triangle, where is the incenter located?

Problem 2 – Perpendicular Bisectors & the Circumcenter

3. What appears to be true about the three perpendicular bisectors of the triangle?

4. In relation to the triangle, where is the circumcenter located?

Problem 3 – Altitudes & the Orthocenter

5. What appears to be true about the three altitudes of the triangle?

6. In relation to the triangle, where is the orthocenter located?

Problem 4 – Medians & the Centroid

7. What appears to be true about the three medians of the triangle?

8. In relation to the triangle, where is the centroid located?

9. Record some measurements from Problem 4.

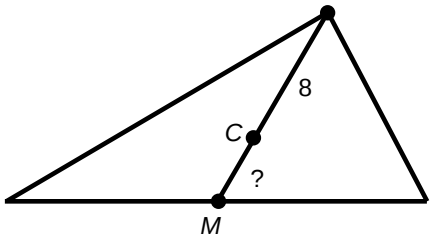
Distance from Vertex to Centroid	Distance from Centroid to Midpoint

10. What is the ratio of the two distances?

Exercises

Use your ratio from Question 10 above to find the missing values for each.
C is the centroid and *M* is a midpoint.

11.



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