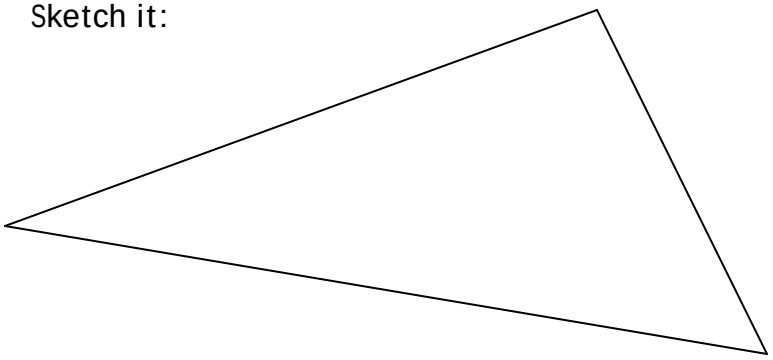
Name: _____ Date: _____
Geometry // Mr. Falci

Chapter 5: Relationships in Triangles
Extra Practice

1. In a triangle, the intersection of the *perpendicular bisectors* is called the

_____

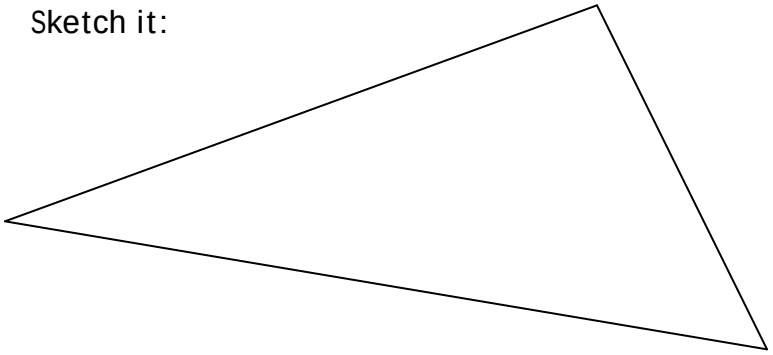
Sketch it:



2. In a triangle, the intersection of the *altitudes* is called the

_____

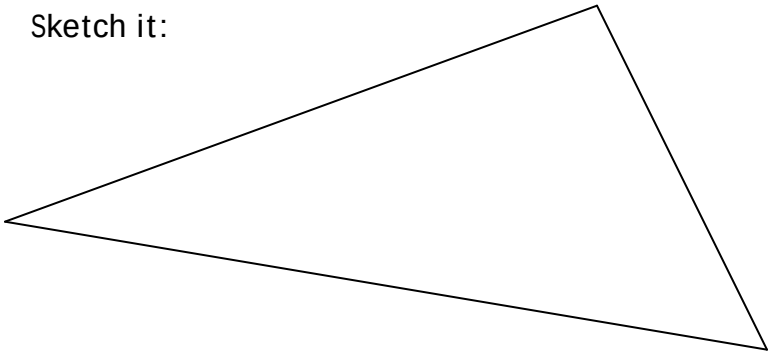
Sketch it:



3. In a triangle, the intersection of the *angle bisectors* is called the

_____

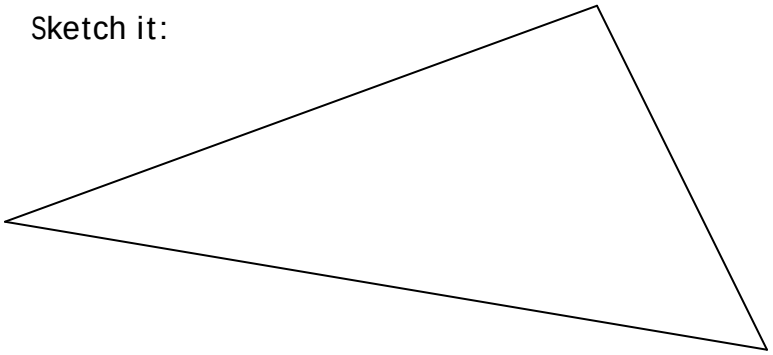
Sketch it:



4. In a triangle, the intersection of the *medians* is called the

_____

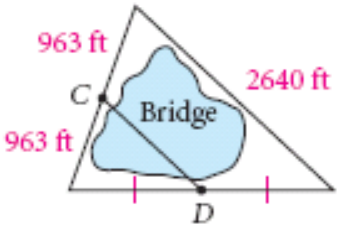
Sketch it:



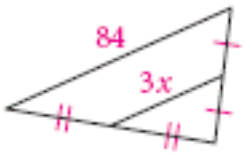
5. Define midsegment: _____

_____.

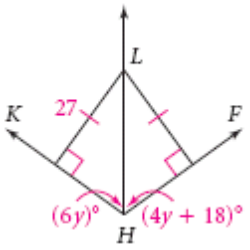
6. Use the information in the diagram to determine the length of the bridge. *The diagram is not to scale.*



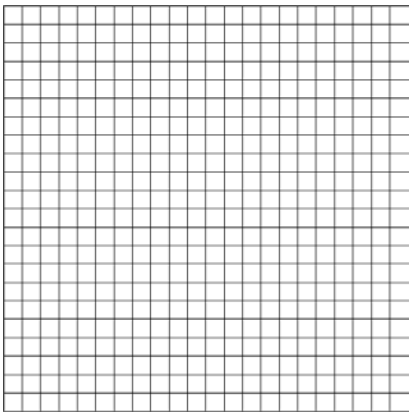
7. Find the value of x.



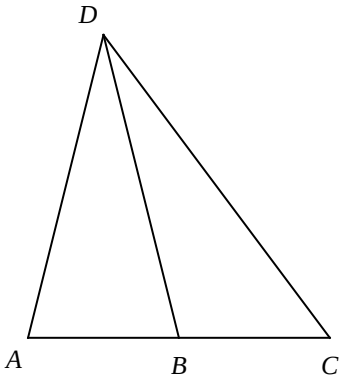
8. Find the value of y. *The diagram is not to scale*.



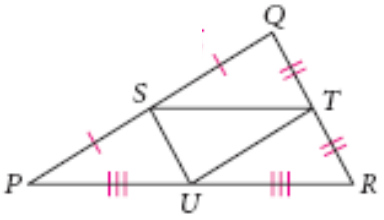
9. Find the center of the circle that you can circumscribe about ΔOPS with $O(0, 0)$, $P(0, 6)$, and $S(4, 0)$.



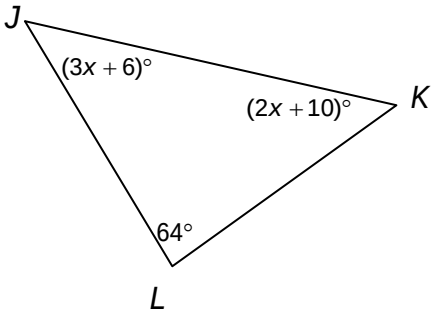
10. Find the length of $\overline{AB}$, given that $\overline{DB}$ is a median of the triangle and $AC = 56$.



11. Identify 3 sets of parallel segments in the diagram below.



12. List the sides in order from shortest to longest. *The diagram is not to scale.*



13. Could the lengths 3, 9, 12 represent the sides of a triangle? Why or why not?

14. If two sides of a triangle measure 10 and 23, write an inequality to represent the possible lengths for the third side.

15. Find $m\angle ACD$.