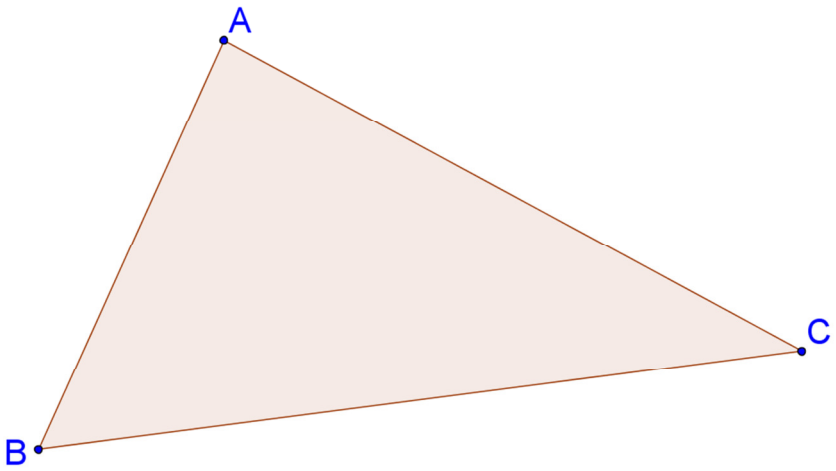
Triangle Factoids Working Page

Draw the **perpendicular bisector** of side BC. Name it line QR.



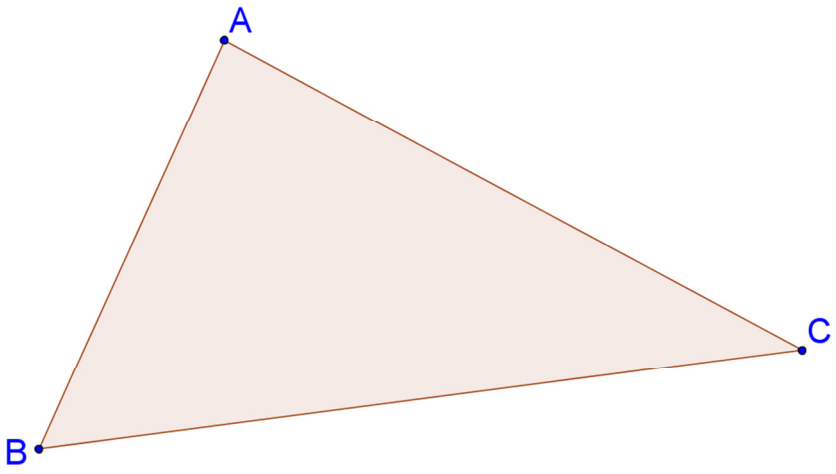
Does line QR pass through a vertex of triangle ABC?

Does that matter, based on the definition of perpendicular bisector?

Now, create a point, S, on line QR, that is *above* side BC. Show the two segments that can be drawn to create an isosceles triangle. Mark the segments as congruent.

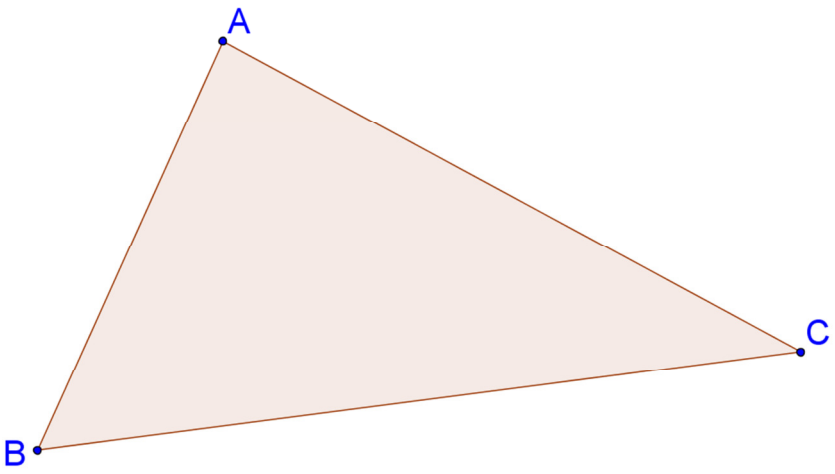
Angle Bisector

Draw the bisector of angle A.



If m∠A = 86, what is the measure of each new angle formed? How do you know?

Based on the definition of **median of a triangle**, draw the median of the following triangle (name it segment AQ) that contains vertex A.



What do you need to keep in mind to decide where to draw point Q?

Now, draw a second median, from vertex B. Name it segment BR.

In another color, show the point where the two medians meet. Name it point K.

Use the rule on the summary sheet to answer the following questions.

If *BK* = 12, what is *BR*?

If *BK* = 12, what is *KR*?

Use what you have learned to complete the worksheet "Medians and a centroid." Show your work and the relationships. Sample questions have been done for you to follow the format.