


TRIANGLE MIDSEGMENT POSTULATE
The midsegment is to the $\qquad$ and the length of the side.

## Perpendicular Bisector Postulate

 If a point lies on the of a segment, then it is from the endpoints

## Angle Bisector Postulate

If a point lies on the of an angle, then it is
from the sides of the angle.


## Points of Concurrency What do you need to make the following?

Circumcenter -

Incenter -

Orthocenter -

Centroid -

## Special Properties of Points of Concurrency

Circumcenter
1)
2)

Incenter
1)
2)

Centroid
1)
2)

## Location of the point of concurrency

Possible answers: Inside, Outside, On a side, on a vertex

| Point of <br> Concurrency | Acute Triangle | Obtuse Triangle | Right Triangle |
| :--- | :--- | :--- | :--- |
| Circumcenter |  |  |  |
| Incenter |  |  |  |
| Circumcenter |  |  |  |

## SIDE-ANGLE INEQUALITY POSTULATE

 In a triangle, the ___ side is opposite the angle with the biggest measure, and the shortest side is the angle with the $\qquad$ measure.
## TRIANGLE INEQUALITY POSTULATE

 The sum of the lengths of any two sides of a triangle is the length of the $\qquad$ side.