## Perpendicular Bisector of a Triangle:

## Concurrent Lines:

## Point of Concurrency:

*The 3 perpendicular bisectors are concurrent* The point of concurrency can be:


## Circumcenter:

## Circumscribe:



|  |  | If a point is on the <br> perpendicular bisector of a <br> segment, then it is <br> equidistant from the <br> endpoints of the segment. <br> Theorem |
| :--- | :--- | :--- |

1. Find each measure:
a. $\quad M N=$

b. $B C=$

c. $T U=$


## Angle Bisector of a Triangle:

## Incenter:

## Inscribe:



| Angle Bisector Theorem | If a point is on the bisector <br> of an angle, then it is <br> equidistant from the sides <br> of then angle |
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| Converse of the Angle <br> Bisector Theorem | If a point in the interior of <br> an angle is equidistant from <br> the sides of the angle, then <br> it is on the bisector of the <br> angle. |

2. Find each measure:

b. If $m /-E F G=50^{\circ}$ then $m \_E F H=$

c. $m / M K L=$

