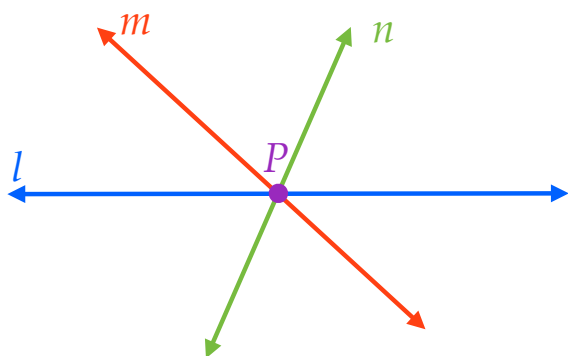
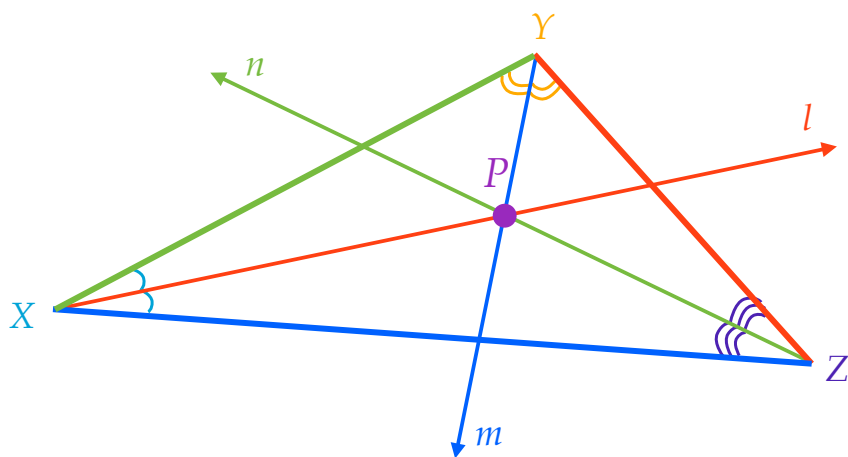


When three or more lines intersect at one point, the lines are said to be **concurrent**.



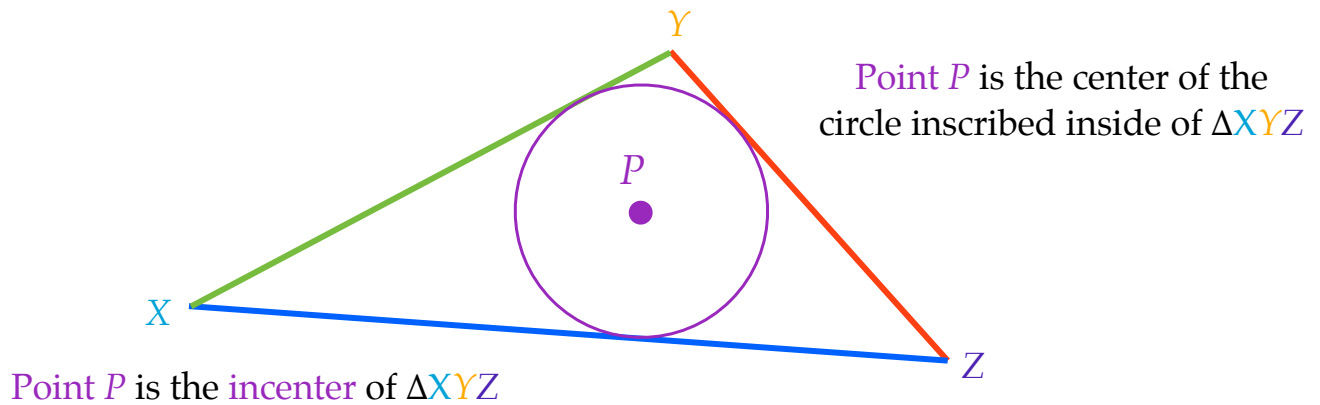
Incenter of a Triangle

The **point of concurrency** of the angle bisectors of a triangle.



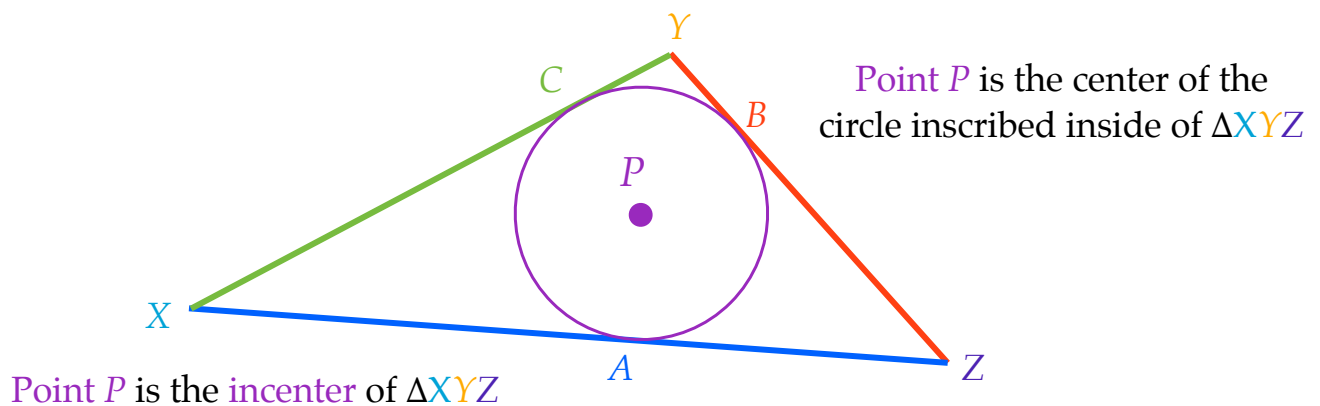
Incenter of a Triangle

The **incenter** is the center of the circle that can be inscribed inside the triangle.



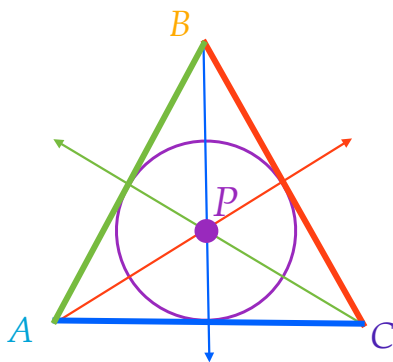
Incenter Theorem

The **incenter of a triangle** is equidistant from all sides of the triangle.

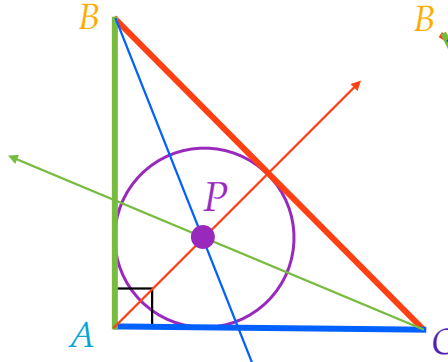


Incenter of a Triangle

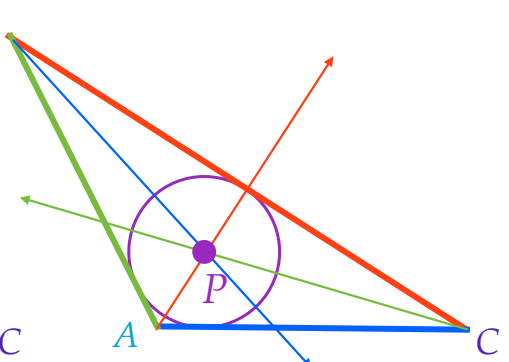
The **incenter** of a triangle is always inside the triangle.



Point P , the **incenter**,
is inside of $\triangle ABC$



Point P , the **incenter**,
is inside of $\triangle ABC$

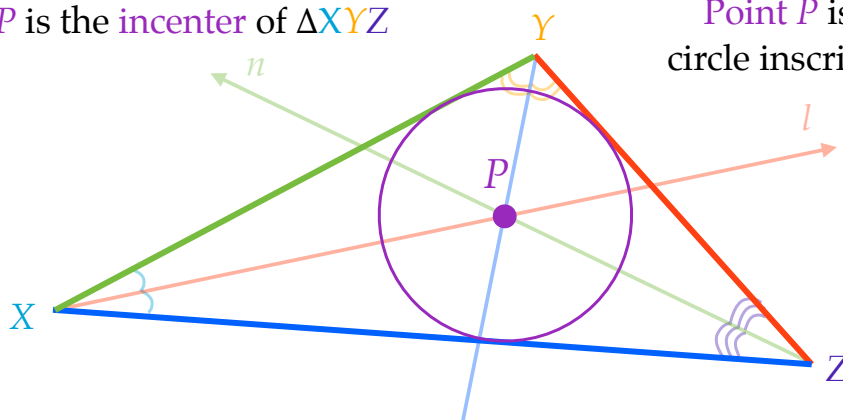


Point P , the **incenter**,
is inside of $\triangle ABC$

Incenter of a Triangle

The **point of concurrency** of the angle bisectors of a triangle.

Point P is the **incenter** of $\triangle XYZ$



Point P is the center of the
circle inscribed inside of $\triangle XYZ$

The **incenter of a triangle** is equidistant from all sides of the triangle.