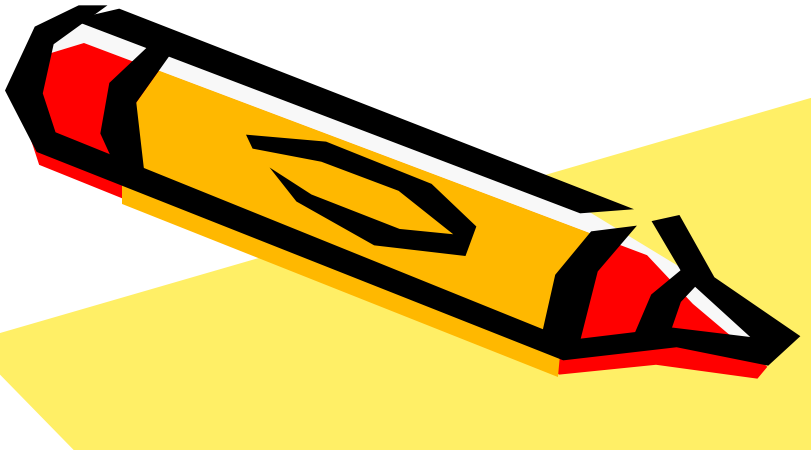
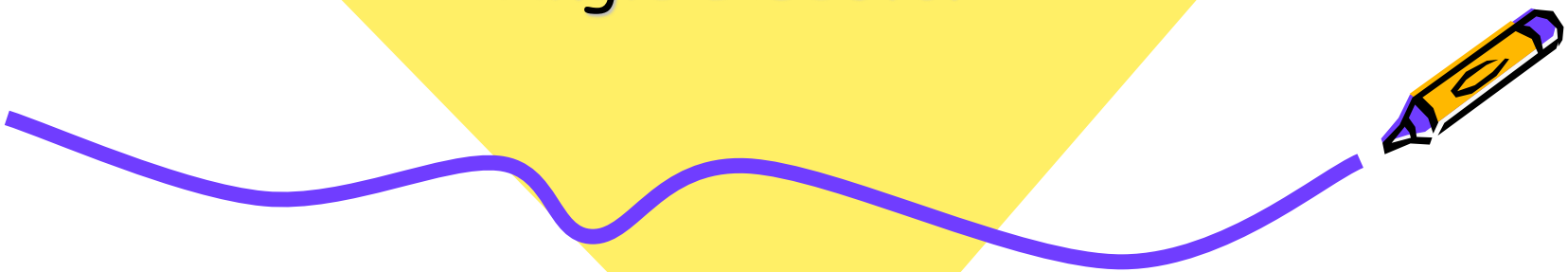


Geometry

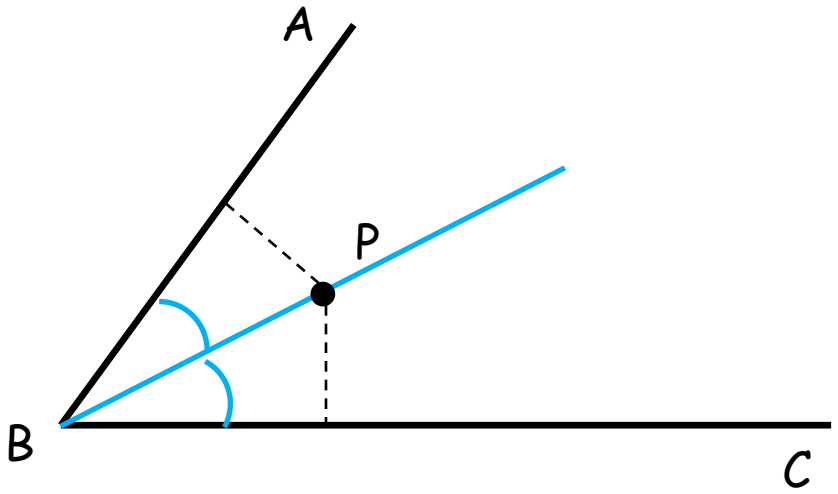
Angle Bisector



Angle Bisector

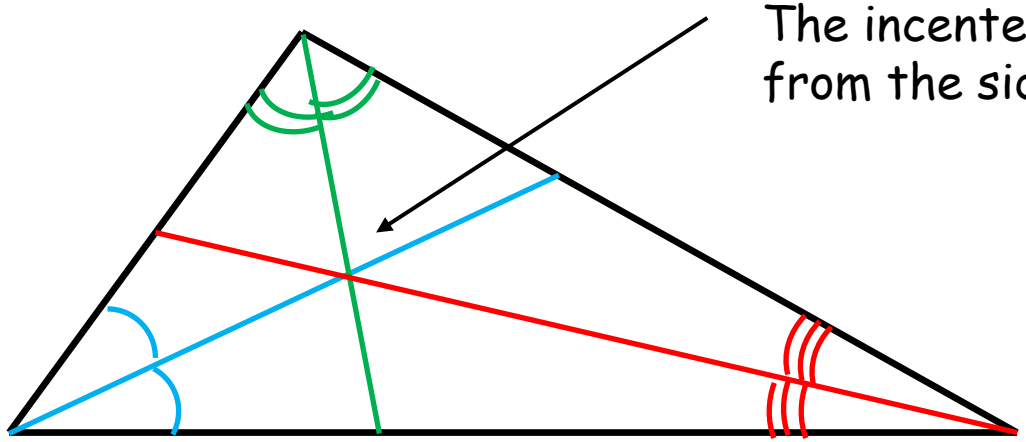
A segment that bisects an angle.

Any point on the bisector is equidistant to the sides of the angle.



Angle Bisector

A triangle could have up to 3 angle bisectors.
They will intersect inside the triangle.



The point of concurrency is called the incenter.
The incenter is equidistant from the sides.

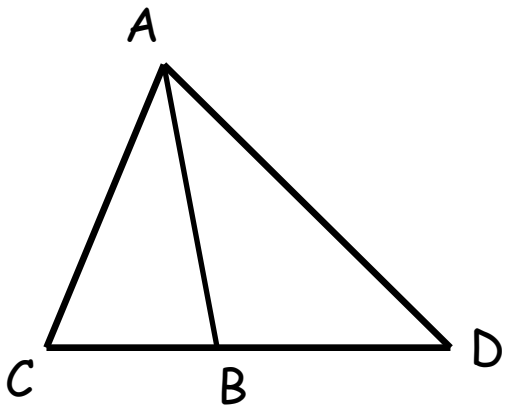
Practice

$\overline{AB}$ is an angle bisector.

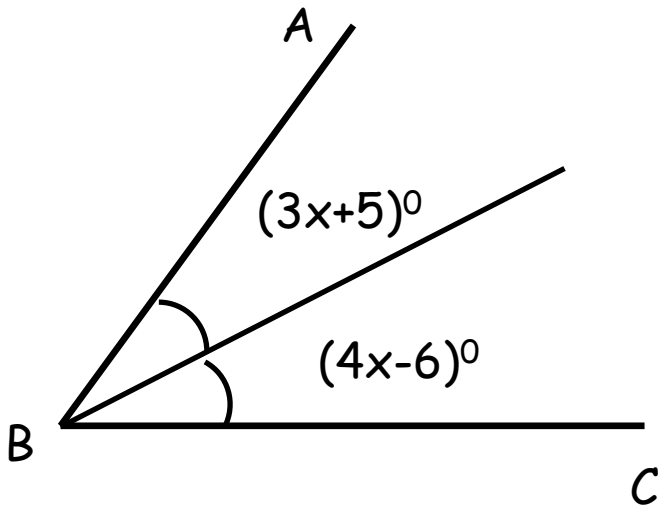
$\angle CAD = (6x - 70)^0$

$\angle CAB = (2x - 10)^0$

Find x.

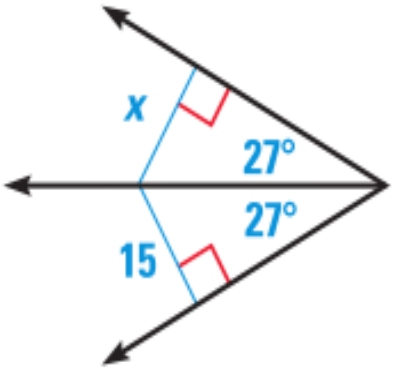


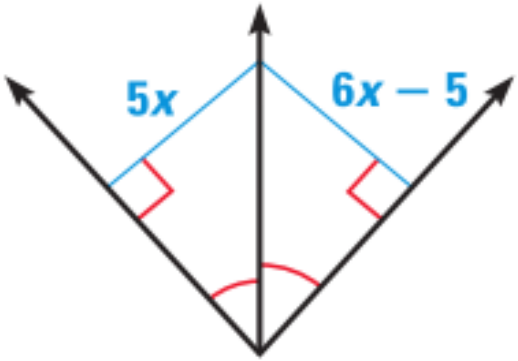
Find x.



Practice

Find x.





N is the incenter.
Find ND.