CHAPTER 6 REVIEW SHEET
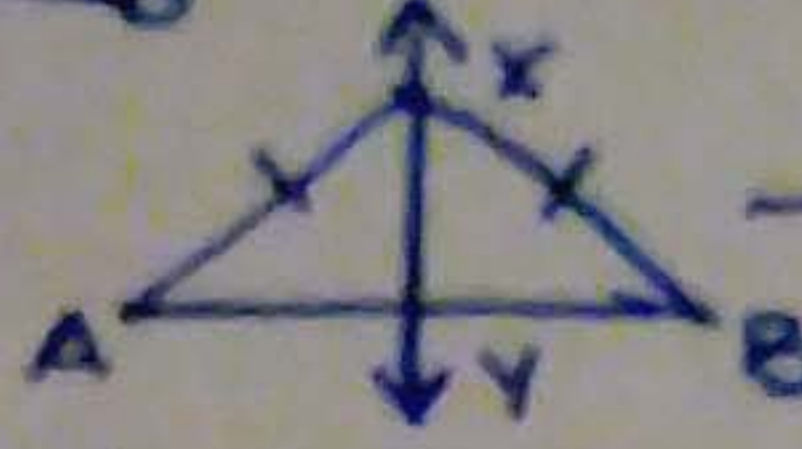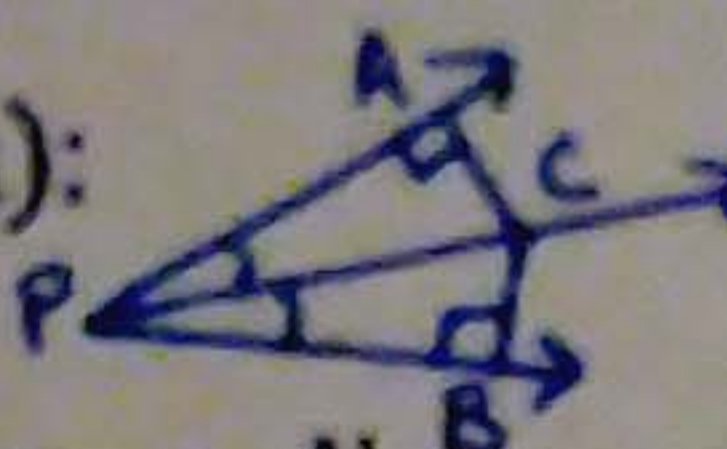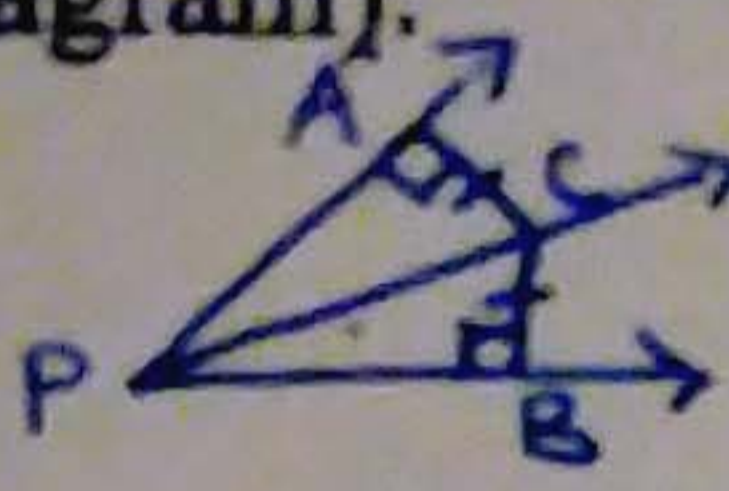
Section 1:

⊥ Bisector Theorem (draw a diagram): → $AX = BX$

Converse of ⊥ Bisector Theorem (draw a diagram): → $\overline{XY} \perp \overline{AB}$ and $\overline{YA} \cong \overline{YB}$

Angle Bisector Theorem (draw a diagram): → $AC = BC$

Converse of Angle Bisector Theorem (draw a diagram): → $\angle APC \cong \angle BPC$

Section 2 and 3:

Point of concurrency: THE POINT WHERE THREE OR MORE LINES INTERSECT.
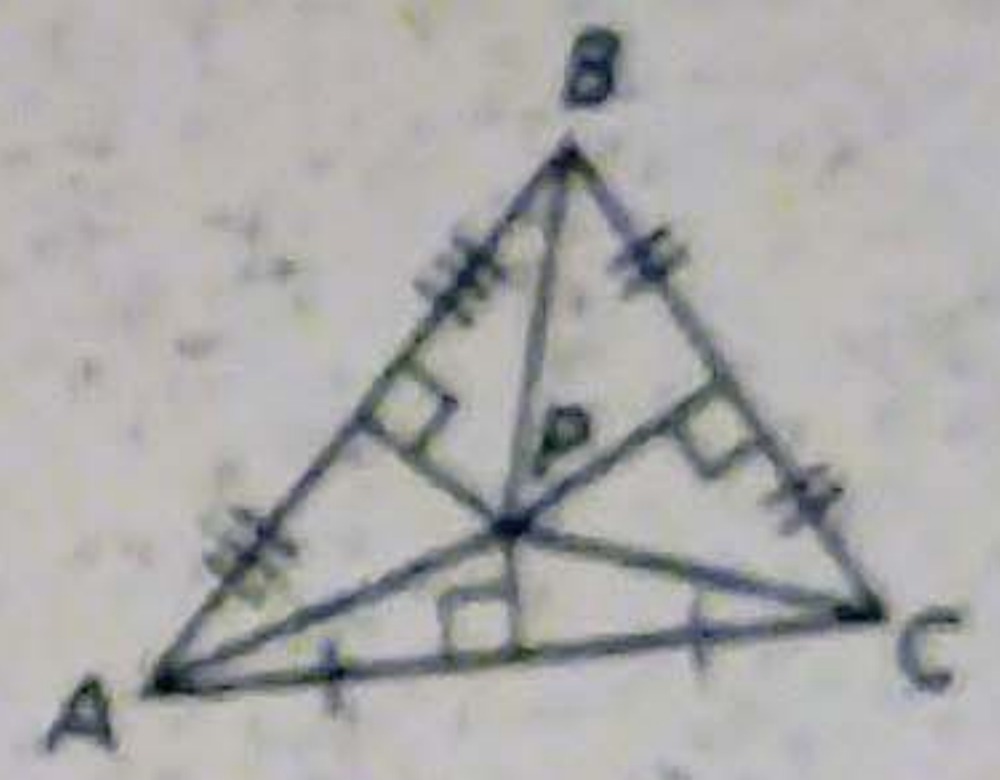
For the following 4 problems, fill in the first blank with the correct vocab term. Then fill in the blanks/answer the question(s) about its properties.

__CIRCUMCENTER__: where the __PERPENDICULAR BISECTOR__ of the __TRIANGLE__ intersect.

**equidistant from the __VERTICES__ of the triangle

**When is this point inside/outside/on the triangle?:

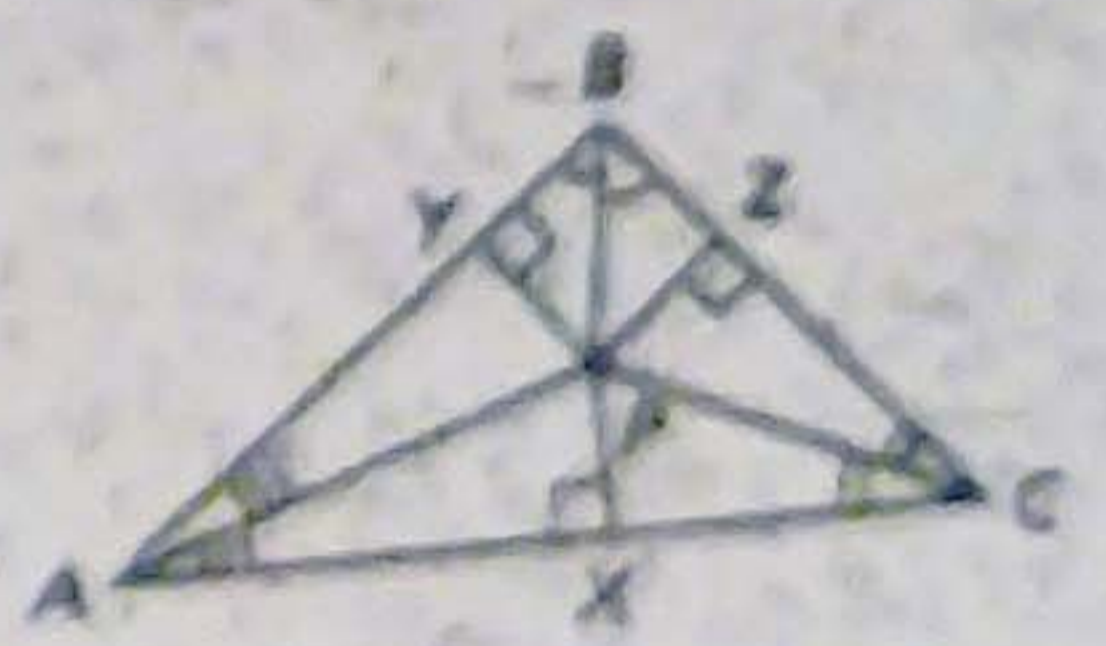ACUTE : INSIDE   RIGHT : ON   OBTUSE : OUTSIDE

__INCENTER__: where the __ANGLE BISECTORS__ of the __TRIANGLE__ intersect.

**equidistant from the __SIDES__ of the triangle

**Where is this point always located? Inside, outside, or on the triangle?:

ALWAYS INSIDE

Section 4:

Midsegment of a triangle connects two of the __MIDPOINTS__ of the __SIDES__.

The midsegment triangle is: THE TRIANGLE FORMED BY THE THREE MIDSEGMENTS (△XYZ)

Triangle Midsegment Theorem:
1) The midseg. is __||__ to a side of the △
2) The length of the midseg. is __½__ the length of that side