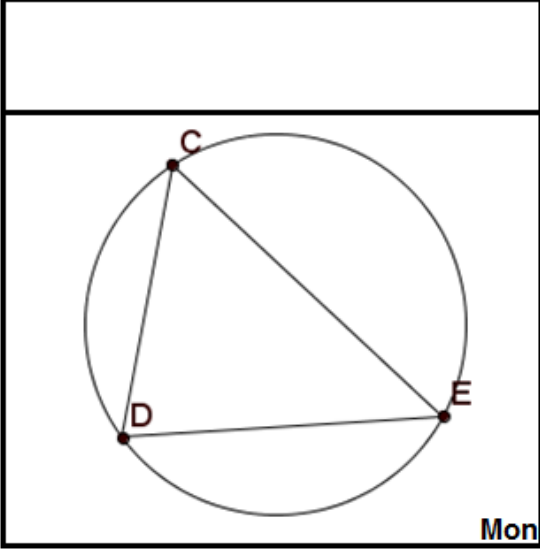


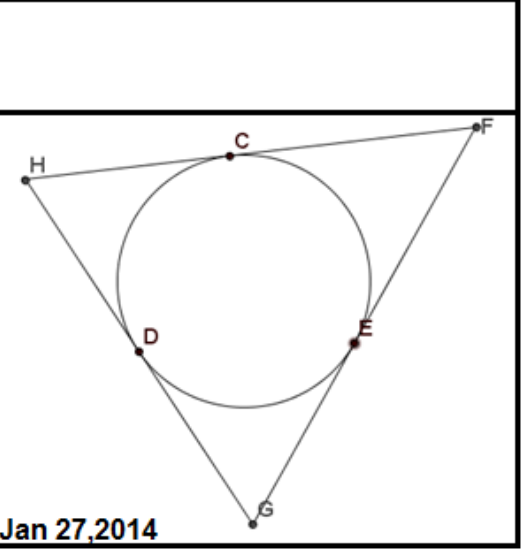
Write the abbreviation (INC, CIR, ORT, or CEN) in the blank for the name of the center point described in each statement. Abbreviations may be used more than once. **Mon. Jan 27, 2014**

- 9. Incenter, Circumcenter, Orthocenter, Centroid**
- ___ A) The point equidistant from the 3 sides of a triangle.
 - ___ B) The center of gravity of a thin metal triangle.
 - ___ C) The point equidistant from the 3 vertices.
 - ___ D) The intersection of the perpendicular bisectors.
 - ___ E) The intersection of the altitudes of a triangle.
 - ___ F) The intersection of the angle bisectors of a triangle.
 - ___ G) The intersections of the medians of a triangle.

Which of the four constructions is necessary to find the center of the triangle that is the center of the circumscribed circle?
 Draw and LABEL this construction on the diagram.



Which of the four constructions is necessary to find the center of the triangle that is the center of the circumscribed circle?
 Draw and LABEL this construction on the diagram.



IN SUMMARY: What you should know about Points of Concurrency: Glue this anchor tab in your composition book. Fill in the blank or answer the questions. Show work for algebraic solutions. **Monday Jan 27, 2014**

1a. Segment AO, CN and BM are called...? 1b. The point T is called the...? 1c. How does point T divide each segment AO, CN, and BM? Write three equations. 1d. Solve for the length TO and AT if $TO=3x+6$ & $AT=5x+20$. Solve for length CB if $CO=6w+9$ & $BO=3(w+8)$	2a. Lines GV, HV, and IV are called...? 2b. The point V is called the...? 2c. What is special about point V, the intersection of lines GV, HV and IV? Be specific. 2d. Solve for the angle measure $\angle HGV$ if $\angle IGV=6x+7$ and $\angle HGI=20x-34$	3a. Lines DS, ER and FQ are called...? 3b. The point P is called the...? 3c. When triangle DEF is... acute point P lies... obtuse point P lies... right point P lies on the... at its...? 3d. Find the length of DS if $PE=13$ and $SE=12$, and $PR=8$ and $RD=15$.	4a. Lines through point U are called...? 4b. The point U is called the...? 4c. What is special about point U, the intersection of these lines? 4d. $UL=7x+5$, $UK=10x-4$ and $UJ=13w-39$. Find the value of x, UL and w.

Glue this anchor tab in your composition book. Answer these 4 questions about Medians, Perpendicular Bisectors, Altitudes, and Angle Bisectors in your comp book showing work as evidence of your understanding. **Jan 27, 2014**
 Diagrams are NOT drawn to scale. Use markings to indicate what you know to be true about each diagram. **Monday**

5. What segments are shown? What is the center called? Use given info to solve. $CD=5x+15$ $DE=7x-6$ Find x, CD, DE	6. What segments are shown? What is the center called? Use given info to solve. $AD=3x+2$ $BD=5x-8$ $CD=-4a+33$ Find x, AD, BD and a	7. What segments are shown? What is the center called? G is the ___ of $\triangle ABC$ A is the ___ of $\triangle GBC$ B is the ___ of $\triangle GAC$ C is the ___ of $\triangle GAB$	8. What ray is shown? $m\angle ABD=5x$ $m\angle DBC=2x+36$ Find x, $m\angle ABD$, $m\angle BCD$ & $m\angle ECD$