

Name: Kelly

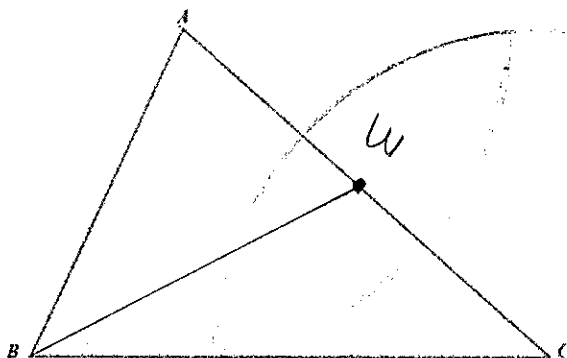
Date: WEEK OF 9/17/18

CC GEOMETRY

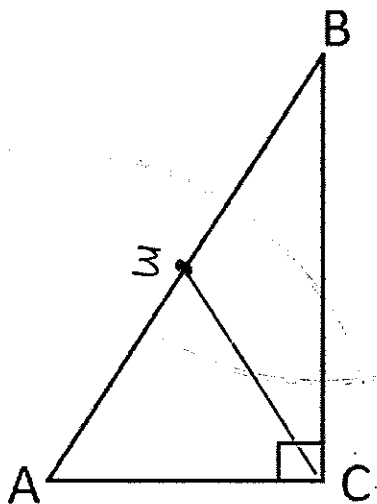
BATAFARANO

UNIT 1: CONSTRUCTIONS & UNKNOWN ANGLES | LESSON 5 – 8: HOMEWORK PACKET

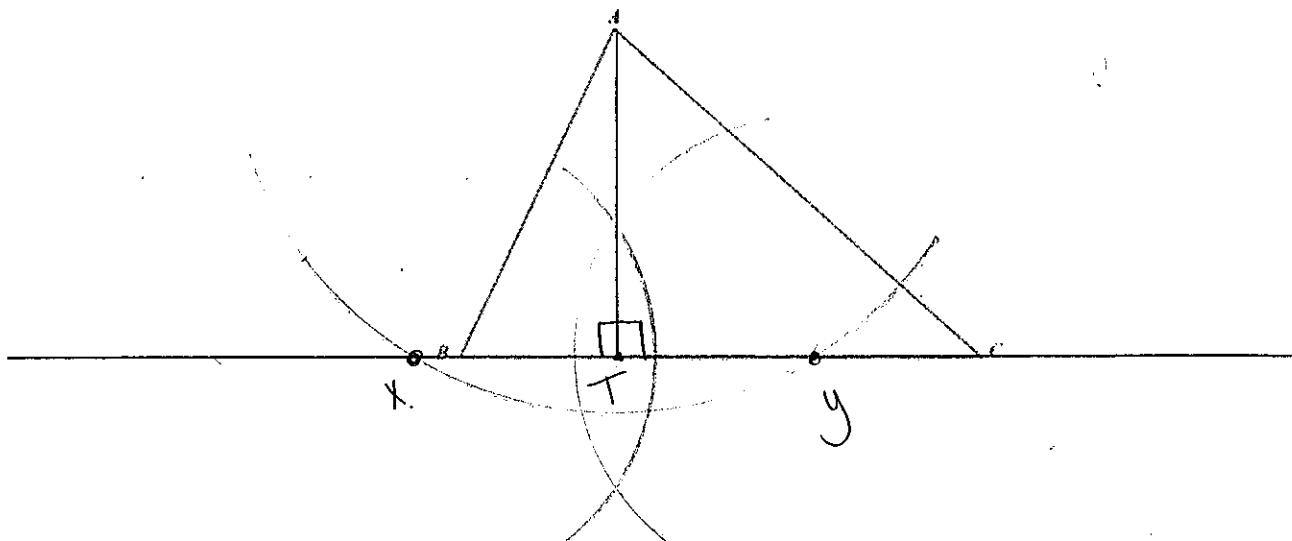
1. Using a compass and a straight edge, construct the median to AC. Label it M. Leave all construction marks.



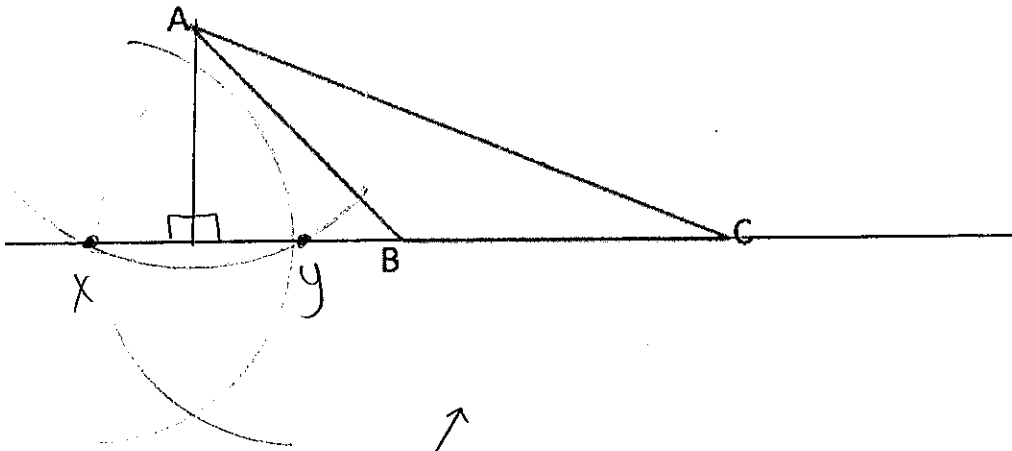
2. Using a compass and a straight edge, construct the median to AB. Label it M. Leave all construction marks.



3. Using a compass and a straight edge, construct the altitude to BC. Label it T. Leave all construction marks.

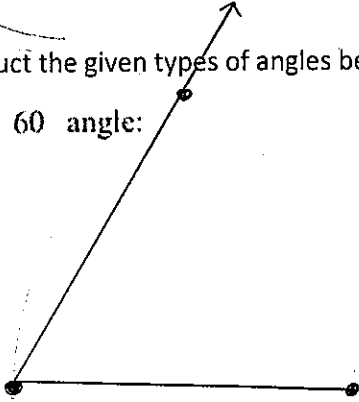


4. Using a compass and a straight edge, construct the altitude to BC. Label it T. Leave all construction marks.

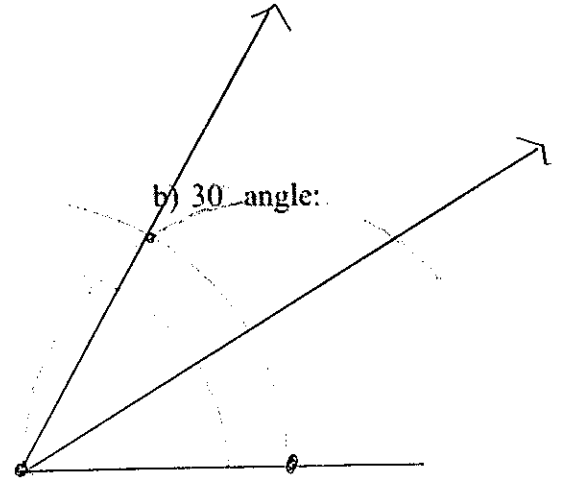


5. Construct the given types of angles below:

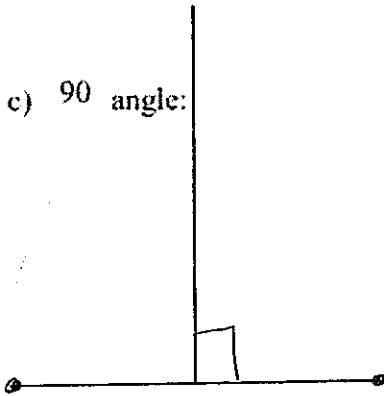
a) 60 angle:



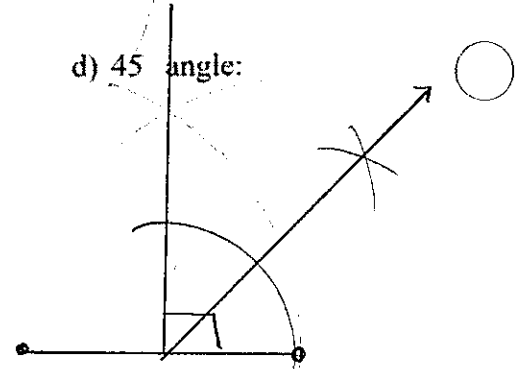
b) 30 angle:



c) 90 angle:

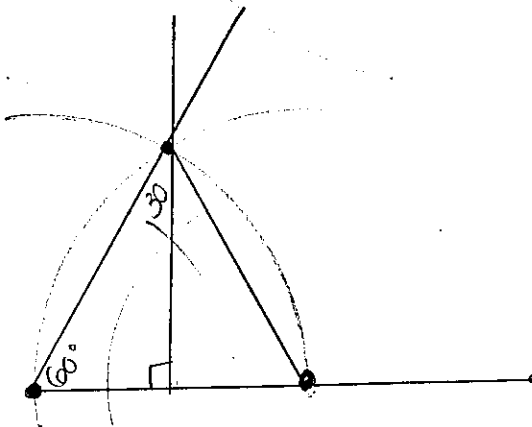


d) 45 angle:

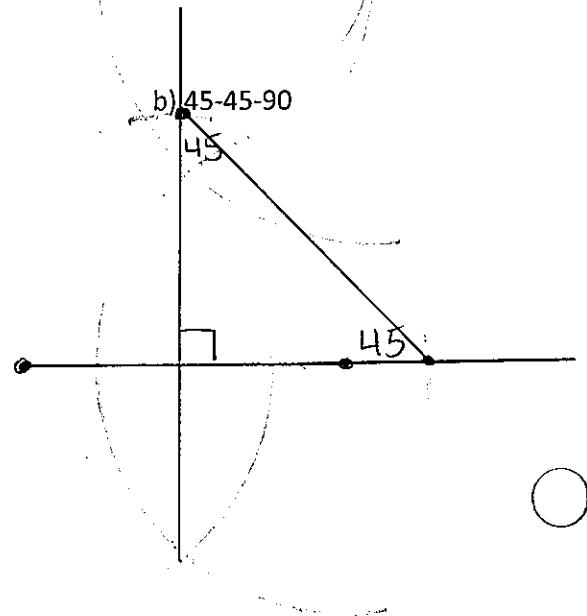


6. Construct the following special triangles:

a) 30-60-90

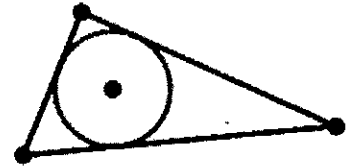
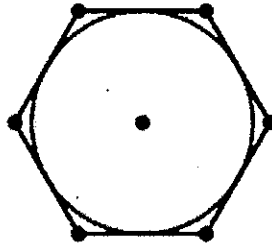
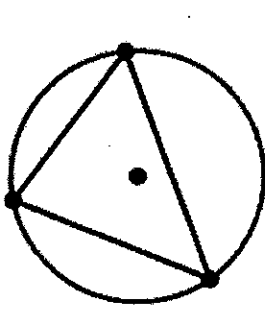


b) 45-45-90



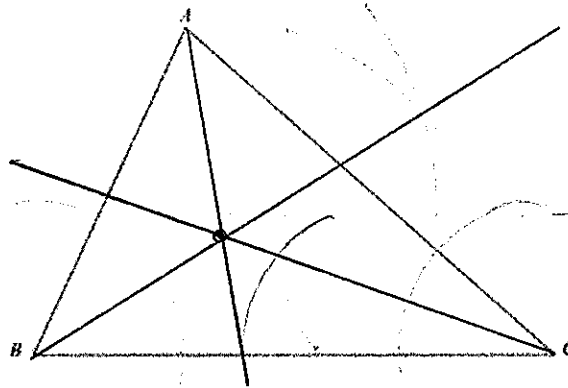
7. Determine whether the relationship is **INSCRIBED** or **CIRCUMSCRIBED**.

a) The triangle is inscribed. b) The hexagon is circumscribed. The circle is inscribed.



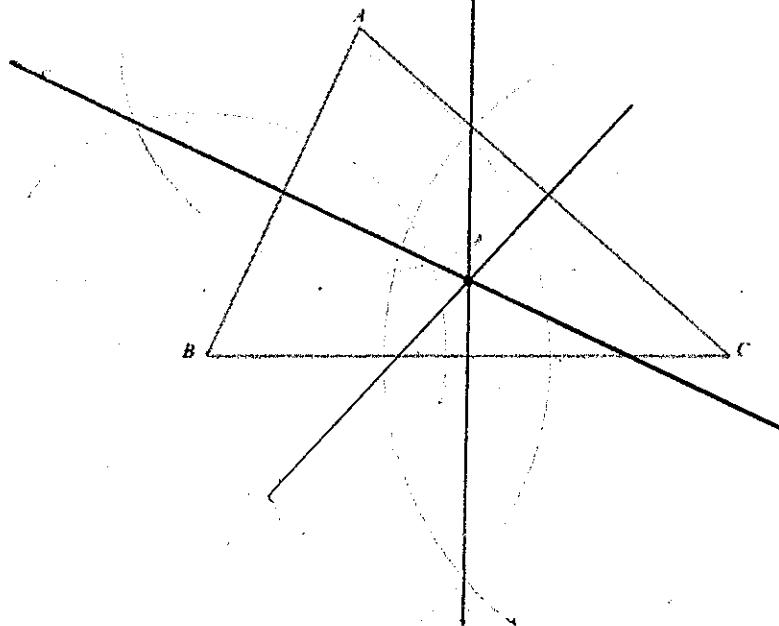
8. Using a compass and a straight edge, construct the incenter of triangle ABC. Label it P. Leave all construction marks.

\* bisectors \* only need 2!



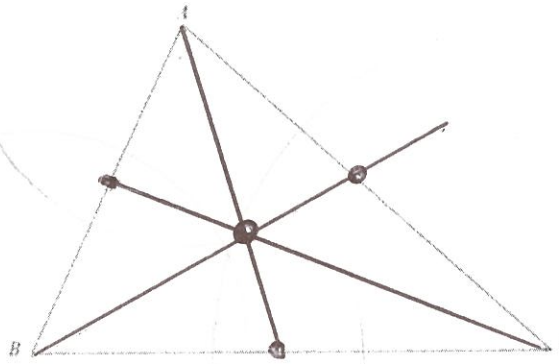
9. Using a compass and a straight edge, construct the circumcenter of triangle ABC. Label it P. Leave all construction marks.

⊥ bisectors



10. Using a compass and a straight edge, construct the centroid of triangle ABC. Label it P. Leave all construction marks.

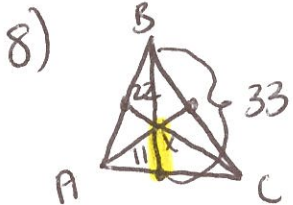
medians



TEXTBOOK: pg. 260-261 # 3, 4, 8, 27

3) **A**

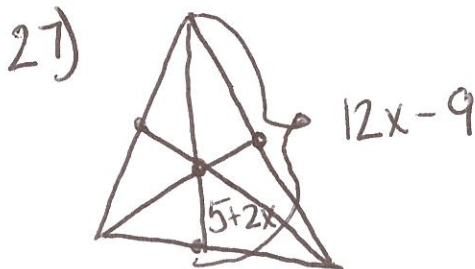
4) **A**



$$x + 2x = 33$$

$$\frac{3x}{3} = \frac{33}{3}$$

$$x = 11$$



$$5 + 2x + 2(5 + 2x) = 12x - 9$$

$$\underline{5} + \underline{2x} + \underline{10} + \underline{4x} = 12x - 9$$

median =  $12(4) - 9$

$$48 - 9 = \underline{39}$$

$$\begin{array}{r} 6x + 15 = 12x - 9 \\ -6x + 9 \quad -6x + 9 \\ \hline 24 = 6x \\ \frac{24}{6} = \frac{6x}{6} \\ x = 4 \end{array}$$