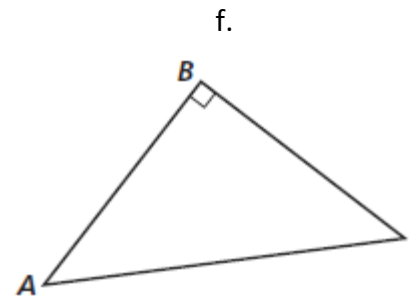
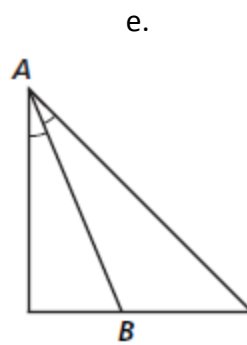
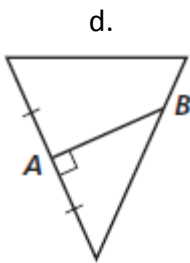
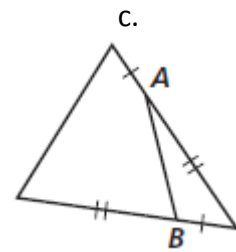
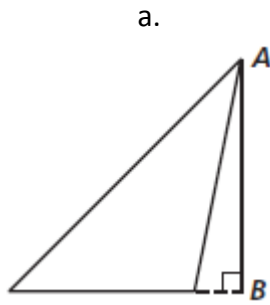
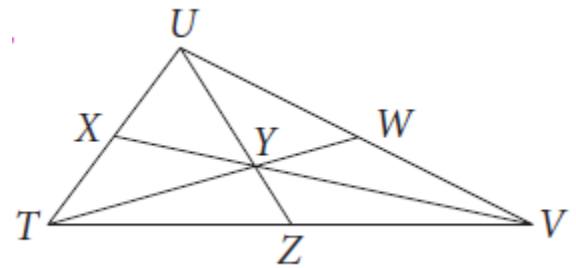


1. In each picture, is \overline{AB} a perpendicular bisector, angle bisector, median or altitude or none of these?



2. In $\triangle TUV$, Y is the **Centroid**.

a. If $YW = 9$, find TY and TW.



b. If $YU = 9$, find ZY and ZU.

c. If $VX = 9$, find VY and YX.

_____ 3. Where do the bisectors of the angles of a triangle intersect?

- a. The Circumcenter
- b. The Incenter
- c. The Orthocenter
- d. The Centroid

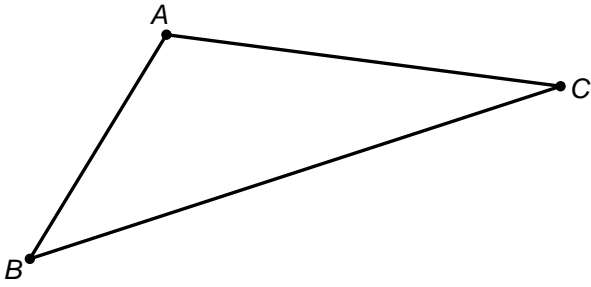
_____ 4. Where do the altitudes of a triangle intersect?

- a. The Circumcenter
- b. The Incenter
- c. The Orthocenter
- d. The Centroid

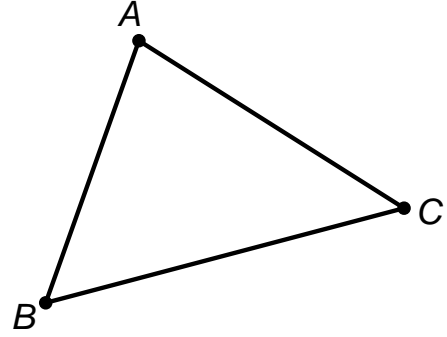
- _____ 5. Which point is always equidistant to the vertices of a triangle?
- a. The Circumcenter
 - b. The Incenter
 - c. The Orthocenter
 - d. The Centroid

6. Construct the **Centroid** of each triangle and label each one P.

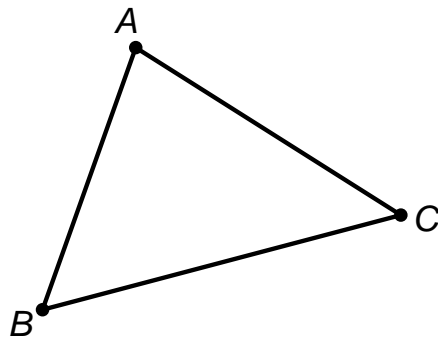
a. An obtuse triangle



b. An acute triangle



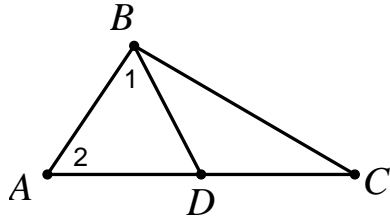
7. Construct the Orthocenter of the triangle and label it P.



Complete a Proof (2-Column, Flow, or Paragraph).

8. Given: $\overline{BD} \cong \overline{CD}$
 $\angle 1 \cong \angle 2$

Prove: \overline{BD} is a median of $\triangle ABC$



9. Given: $\overline{AB} \cong \overline{BC}$
 \overline{BD} a median of $\triangle ABC$

Prove: \overline{BD} is an altitude of $\triangle ABC$

