Honors Geometry Triangle Centers Worksheet 1
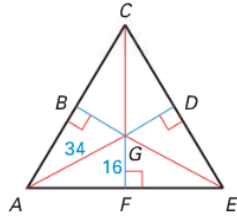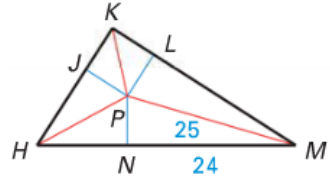**Incenter (angle bisector) & Centroid (median)**
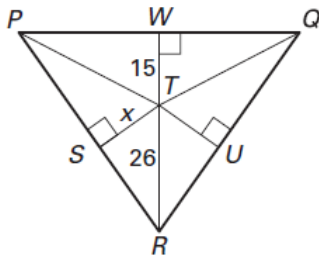
1. Point G is the incenter of ΔACE. Find BG.

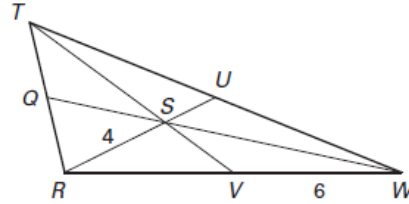**2.** Point P is the incenter of ΔHKM. Find JP

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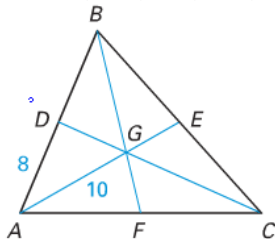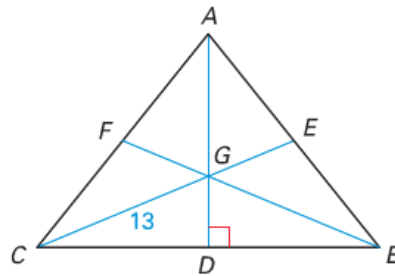**3.** Point T is the incenter of ΔPQR. Find *x*.

4. Point S is the centroid of ΔRTW, RS = 4, VW = 6, and TV = 9. Find RV, SU, RU, RW, TS, and SV.

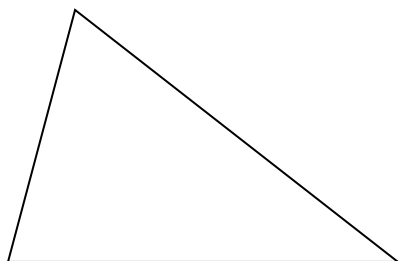**5.** The medians of ΔABC intersect at point G. AD = 8, AG = 10, and CD = 18. Find BD, AB, EG, AE, DG, and GC.

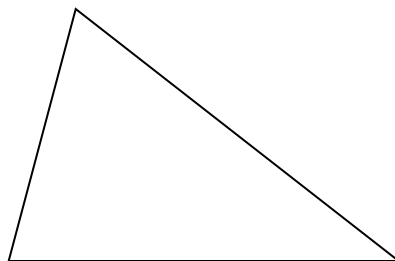**6.** Point G is the centroid of ΔABC, CG = 13, AD = 15, and $\overline{AD} \perp \overline{CB}$. Find AG, GD, GE, CD, DB, and GB.
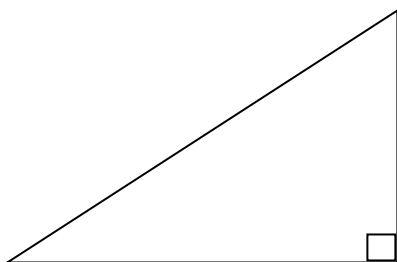
7. Construct the centroid of the triangle below.

8. Construct the incenter and incircle of the triangle below.

9. Construct the incenter and incircle of the triangle below.

10. Construct the centroid of the triangle below.