Name _____ Date _____

Use the diagram shown and the given info to decide whether $\overline{YW}$ is a perpendicular bisector, an angle bisector, a median, or an altitude of ΔXYZ. There may be more than one right answer.

A) $\overline{YW} \perp \overline{XZ}$

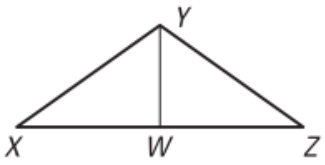
B) $\overline{XW} \cong \overline{ZW}$

C) $\triangle XYW \cong \triangle ZYW$

D) $\angle XYW \cong \angle ZYW$

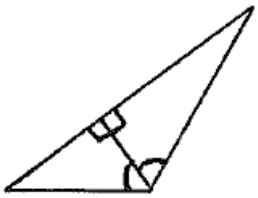
E) $\overline{YW} \perp \overline{XZ}$ and $\overline{XW} \cong \overline{ZW}$

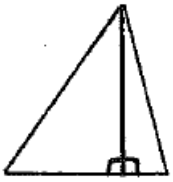
F) $\overline{YW} \perp \overline{XZ}$ and $\overline{XY} \cong \overline{ZY}$

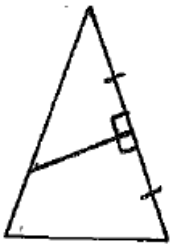


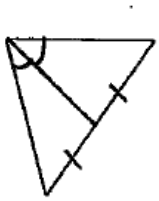
Identify the segment drawn inside the triangle as an altitude, angle bisector, median, or perpendicular bisector.

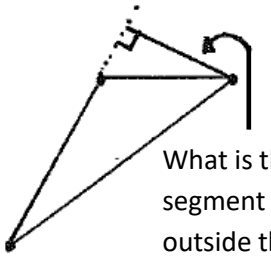
There may be more than one correct answer.



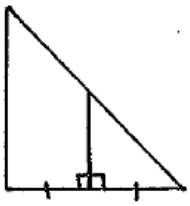


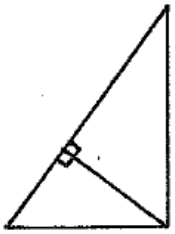


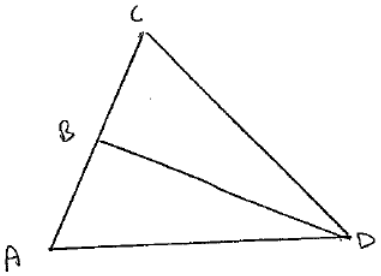




What is this segment (drawn outside the triangle)?







Given: $\angle CDB = 30$

$BD = 3x$

$CB = 5x - 10$

$\overline{BD}$ is an altitude and a median

Find AC

In ΔABC, $\overline{BD}$ is an altitude and $\angle BAC = 5x+5$ and $\angle BDC = 7x + 13$

Find x and $\angle ABD$