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

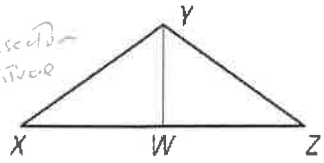
B) $\overline{XW} \cong \overline{ZW}$ MEDIAN

C) $\Delta XYW \cong \Delta ZYW$ ALTITUDE MEDIAN ⊥ BISECTOR ∠ BISECTOR

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

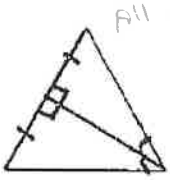
E) $\overline{YW} \perp \overline{XZ}$ and $\overline{XW} \cong \overline{ZW}$ MEDIAN ⊥ BISECTOR

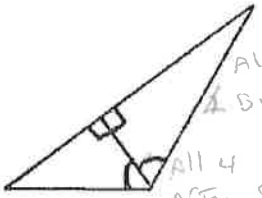
F) $\overline{YW} \perp \overline{XZ}$ and $\overline{XY} \cong \overline{ZY}$ ALL 4



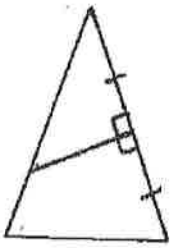
∠ BISECTOR ALTITUDE

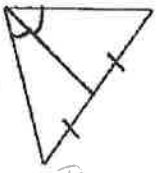
Identify the segment drawn inside the triangle as an altitude, angle bisector, median, or angle bisector. There may be more than one correct answer.

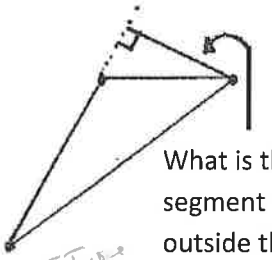

ALL 4


ALTITUDE ⊥ BISECTOR ALL 4 AFTER SAS

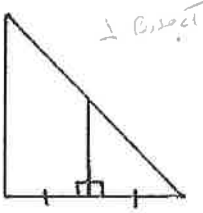

ALTITUDE

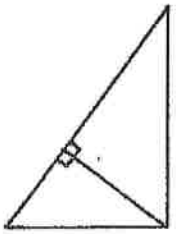

⊥ BISECTOR

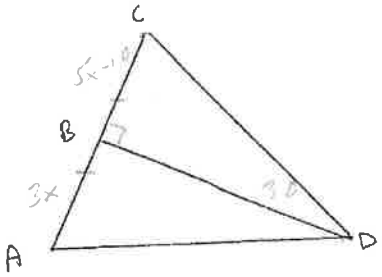

∠ BISECTOR MEDIAN


ALTITUDE

What is this segment (drawn outside the triangle)?


⊥ BISECTOR


ALTITUDE



GIVEN: $\angle CDB = 30$

$BA = 3x$

$CB = 5x - 10$

$\overline{BD}$ IS AN ALTITUDE AND A MEDIAN

FIND AC

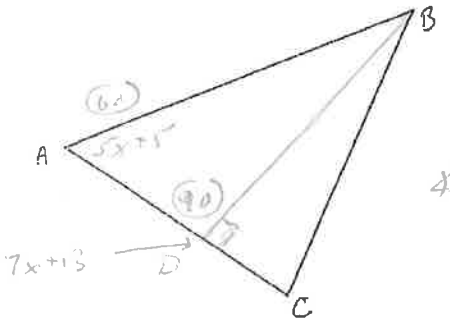
$3x = 5x - 10$

$x = 5$

$AC = 30$

IN ΔABC, $\overline{BD}$ IS AN ALTITUDE AND $\angle BAC = 5x+5$ AND $\angle BDC = 7x+13$

FIND ~~X~~ AND $\angle ABD$



$7x + 13 = 90$

$x = 11$

$\angle ABD = 30$