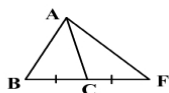


Worksheet Altitude, Median, Angle bisector, perpendicular Bisector

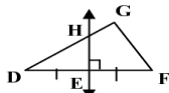
Name _____

Name the special segment for 1-4

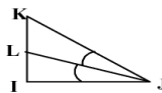
1) \overline{AC}



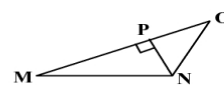
2) \overline{HE}



3) \overline{JL}



4) \overline{PN}

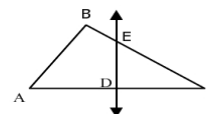


5) Draw a triangle with an altitude outside the triangle.

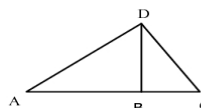
6) Fill in the table below:

	Through vertex	Through midpoint	Forms right angle	Picture
Median	Yes/no	Yes/no	Yes/no	
Altitude	Yes/no	Yes/no	Yes/no	
Angle bisector	Yes/no	Yes/no	Yes/no	
Perpendicular bisector	Yes/no	Yes/no	Yes/no	

7) In $\triangle ABC$, \overline{DE} is perpendicular bisector of \overline{AC} with D on \overline{AC} . If $AD = 2y + 4$, $CD = y + 12$, and $m\angle EDC = 5(x - 12)^\circ$. Find the value of x and y. Find length of AD, DC , and AC .



8) \overline{DB} is an altitude of $\triangle ADC$, and $m\angle DBC = (n^2 + 81)^\circ$. Find the value of n.



9) \overline{DB} and \overline{AE} are medians. If $BC = 6y + 10$, $AB = y^2 + 3y$, $CE = 6x + 12$, $ED = 2x + 60$, then find the value of x and y, and the length of the segments.

