5-3 Median, Bisectors, Altitudes, and Exterior Angles
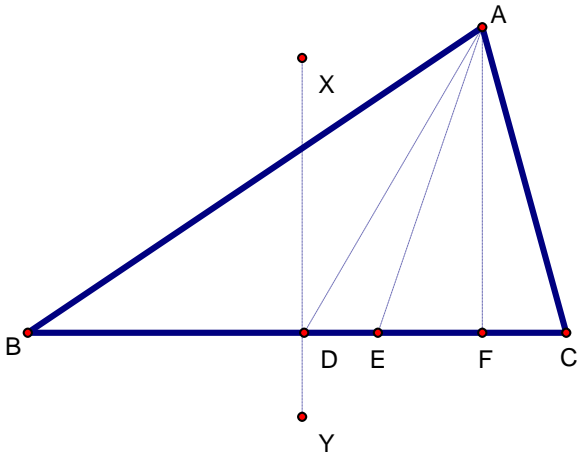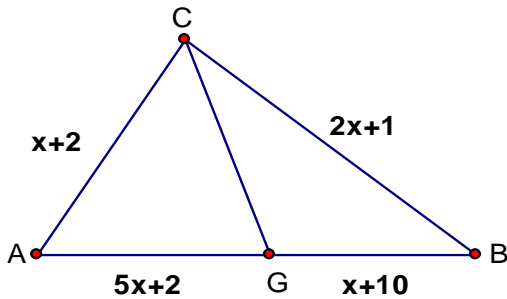
Name _____

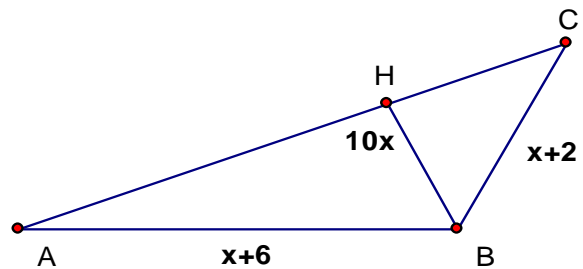In the figure above, BD = CD, $\angle XDC = \angle AFC = 90°$, and $\angle BAE = \angle CAE$.

_____ 1.   What line is a median of $\triangle ABC$?

_____ 2.   What line is an angle bisector of $\triangle ABC$?

_____ 3.   What line is a perpendicular bisector of $\triangle ABC$?

_____ 4.   What line is an altitude of $\triangle ABC$?

5.   Find BC if $\overline{CG}$ is a median of $\triangle ABC$.

BC = _____

6.   Find BC if $\overline{BH}$ is an altitude of $\triangle ABC$.

BC = _____

7. In $\triangle ABC$, A = (2, 5), B= (10, -1), and C = (6, -2).
   What are the coordinates of X if $\overline{CX}$ is a median of $\triangle ABC$?   _____

8. In $\triangle ABC$, A = (1, 3), B= (4, -1), and C = (-6, 3).
   What are the coordinates of X if $\overline{CX}$ is a median of $\triangle ABC$?   _____

9   Which angles are less than $\angle 1$ below? _____

10.   Which angles are less than $\angle 3$ below? _____

11.   Which angles are less than $\angle 5$ below? _____

12.   Which angles are less than $\angle 6$ below? _____