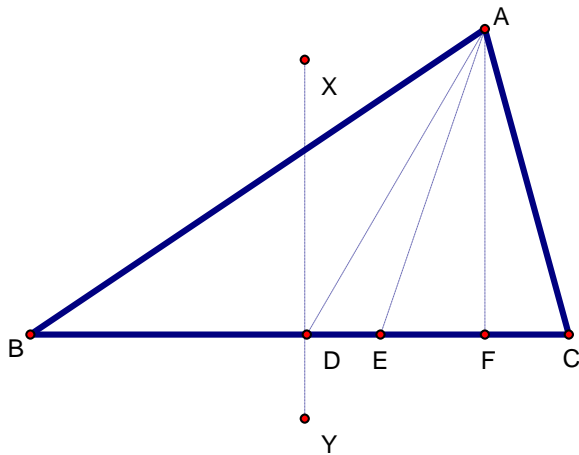


# 5-3 Median, Bisectors, Altitudes, and Exterior Angles

Name: \_\_\_\_\_

Time Start: \_\_\_\_\_ Finish: \_\_\_\_\_

Total Time = \_\_\_\_\_

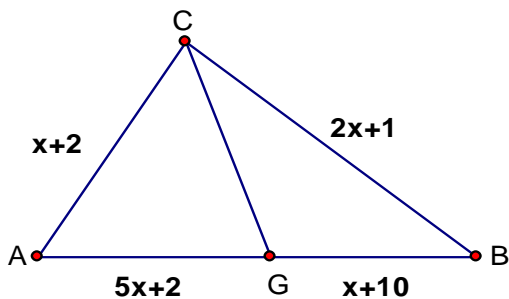


In the figure above,  $BD = CD$ ,  $\angle XDC = \angle AFC = 90^\circ$ , and  $\angle BAE = \angle CAE$ .

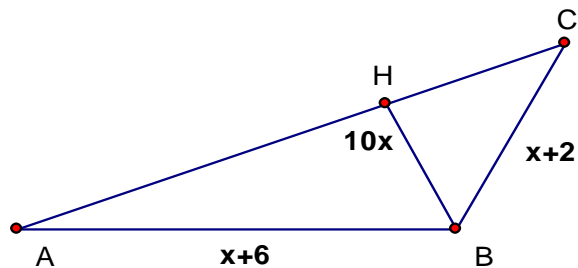
- \_\_\_\_\_ 1. What line is a median of  $\triangle ABC$ ?
- \_\_\_\_\_ 2. What line is an angle bisector of  $\triangle ABC$ ?
- \_\_\_\_\_ 3. What line is a perpendicular bisector of  $\triangle ABC$ ?
- \_\_\_\_\_ 4. What line is an altitude of  $\triangle ABC$ ?

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

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



BC = \_\_\_\_\_



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? \_\_\_\_\_

