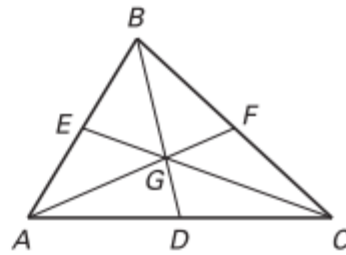Name _____   Date _____

BD, AF, and EC are medians with G as the centroid of the triangle. For each question, find x.

18. $CG = 3x + 7$ and $CE = 6x$

19. $FG = x + 8$ and $AF = 9x - 6$

20. $BG = 5x - 1$ and $DG = 4x - 5$

In the figure E, F, and D are the midpoints of their
 respective sides.

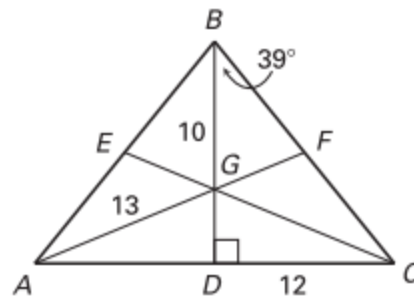21. Given that AB=CB, find AD and $\angle ABD$

22. Find GD and BD

23. Name a median

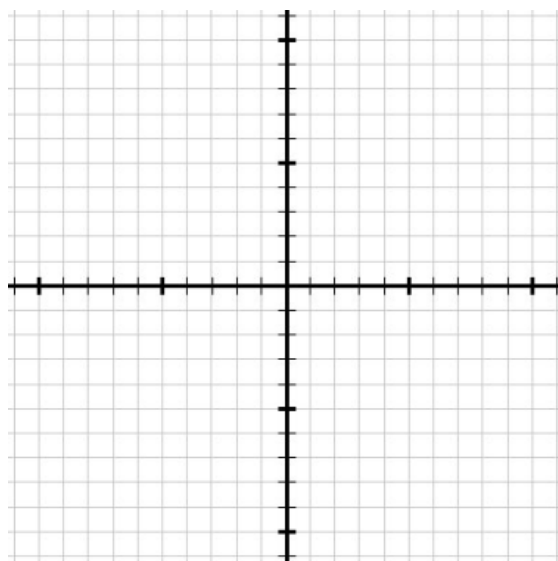24. Name an angle bisector

25. Name a perpendicular bisector

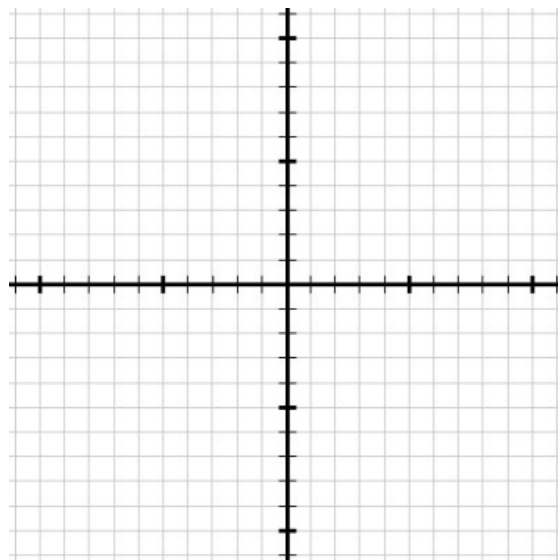26. Find EF

27. AD = 2x – 4. Find x.

Find the coordinates of the centroid P for each triangle.

1. $A(-7, -4), B(-3, 5), C(1, -4)$

2. $A(0, -2), B(6, 1), C(9, -5)$

G is the centroid of $\triangle ABC$, $AD = 8$, $AG = 10$, and $CD = 18$. Find the length of the segment.

1. $\overline{BD}$ 2. $\overline{AB}$

3. $\overline{EG}$ 4. $\overline{AE}$

5. $\overline{CG}$ 6. $\overline{DG}$