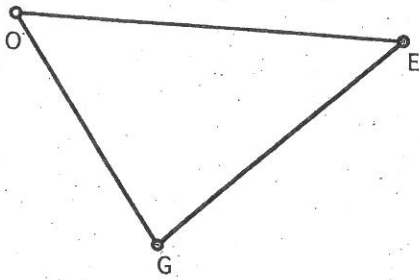
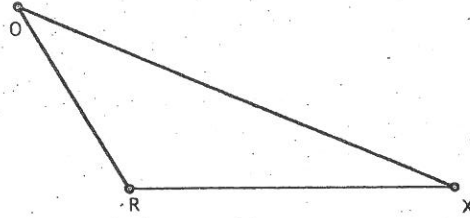


1. Construct the altitude of side  $\overline{GE}$



2. Construct a circumscribed circle about  $\Delta ROX$



#3-4,  $\Delta KID$  has vertices  $K(-5,8)$ ,  $I(1,4)$  and  $D(3,-2)$ . Find the equation of the indicated segment. You must show work. A sketch may help.

3 median of  $\overline{KD}$

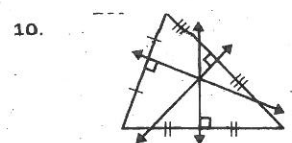
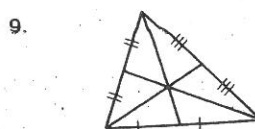
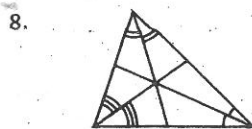
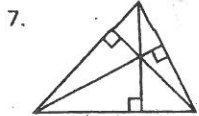
4 altitude of  $\overline{ID}$

#5-6, sketch a figure which illustrates each description. Be sure to label your figure so all information is shown to be true.

5.  $\Delta EFG$  is a right triangle with right angle at F.  $\overline{FT}$  is an altitude and median of  $\Delta EFG$ .

6.  $\overline{LT}$  and  $\overline{OS}$  are medians of  $\Delta LOW$  and the centroid is Q.

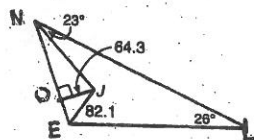
#7-10, Give a name for each point of concurrency.



11.  $\overline{NJ}$  and  $\overline{EJ}$  are angle bisectors of  $\Delta NEL$ . Find each measure:

a.  $m\angle JEO$

b. distance from J to  $\overline{EL}$

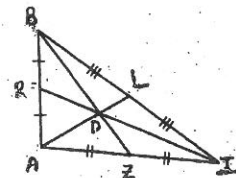


12. In diagram at right  $ID = 12$  and  $BZ = 10$ . Find each measure below:

a.  $RD =$  \_\_\_\_\_

b.  $RI =$  \_\_\_\_\_

c.  $DZ =$  \_\_\_\_\_

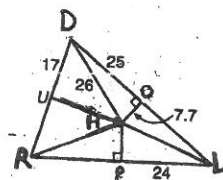


13.  $\overline{PH}$ ,  $\overline{UH}$  and  $\overline{OH}$  are perpendicular bisectors of  $\Delta RDL$ . Find each measure:

a.  $RH =$  \_\_\_\_\_

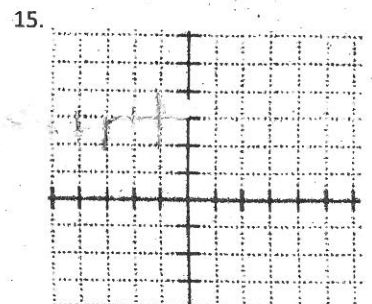
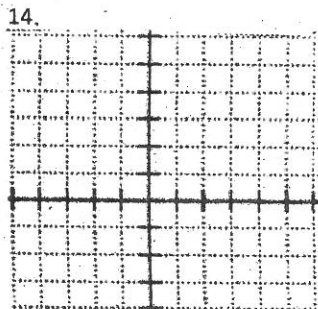
b.  $RL =$  \_\_\_\_\_

c. Perimeter of  $\Delta RDL =$  \_\_\_\_\_



#14-15, Use the graphs provided to help you locate the coordinates of...

14. The circumcenter of  $\Delta JOY$  is  $J(0,0)$ ,  $O(0,5)$  and  $Y(5,0)$



15. The orthocenter (X) of  $\Delta MAS$  if  $M(0,-1)$ ,  $A(2,-3)$  and  $S(4,-1)$