Median-A segment connecting the vertex of a triangle to the midpoint of the opposite side.

Centroid - Point where all medians of a triangle intersect. It is also the "balancing point" for the triangle. Each median is cut into two segments with a ratio of 2:1 (the longer segment is between the vertex $\&$ the centroid).

1. In $\triangle X Y Z, \overline{Y W}$ is a median. What is $X W$ if $X Z=17$ ?

2. In $\triangle A B C, \overline{B X}, \overline{C Z}$, and $\overline{A Y}$ are medians. If $A X=3 x-9$, $X C=2 x-4$, and $Z B=2 x+1$, what is $A Z$ ?


In $\triangle D E F, \overline{D S}, \overline{F R}$, and $\overline{E T}$ are medians.
3. Find $E V$ if $V T=5$.
4. If $F R=20.1$, what is the measure of $\overline{V R}$ ?


In $\triangle T U V, \overline{T E}, \overline{U D}$, and $\overline{V C}$ are medians.
5. Find $E V$ if $U V=24$.
6. If $T C=8$, find $T U$.
7. What is $T D$ if $T V=29$ ?


In $\triangle M N P, M Y, P X$, and $N Z$ are medians,
8. Find the measure of $\overline{W Y}$ if $M W=22$.
9. What is $N W$ if $Z W=10$ ?
10. If $P W=13$, what is $W X$ ?


In $\triangle \triangle F H, \overline{F J}, \overline{H I}$, and $\overline{G K}$ are medians.
11. What is $X K$ if $G K=13.5$ ?
12. If $F X=10.6$, what is the measure of $\overline{X J}$ ?
13. Find $H X$ if $H I=9$.


