$\qquad$

1. If $m \angle P Q R=73$ and $m \angle P Q S=x^{2}$, and $m<S Q R=85-8 x$, find $m \angle S Q R$.

2. If $m<R A M=5 x-2$ and $m<M A T=4 x+3$, find $m<R A T$. $A M$ bisects <RAT.

3. $\overline{R S} \perp \overline{\mathrm{PT}}, m \angle P S Q=(3 x+8 y)^{\circ}, m \angle Q S R=(9 x+y)^{\circ}$ and $m \angle T S U=(5 x+2 y)^{\circ}$ find $x$ and $y$.

4. Find the length of the median $\overline{C D}$

5. $\overrightarrow{A L}$ bisects $\angle K A T, m \angle 2=3 x+10, m \angle 3=9 x+40$. Find $x$.
$x=$ $\qquad$

6. Determine the CONVERSE of the following if-then statement.
"If three points are noncollinear, then they form a triangle."
A. Three points are noncollinear if and only if they form a triangle.
B. If three points are not noncollinear, then they do not form a triangle.
C. If three points form a triangle, then they are noncollinear.
D. If three points do not form a triangle, then they are not noncollinear.
7. Give a counterexample to disprove the following statement:
"If a number is divisible by 5 , then it is divisible by 10 "
8. Point $A$ is between points $L$ and $C$ on $\overline{L C}$. If $L A=x+3$ and $A C=6 x$, and $L C=80$, then $x=$ $\qquad$
9. Find $x$.

