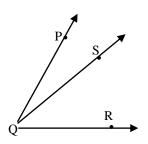
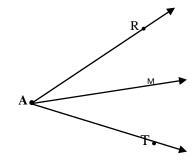
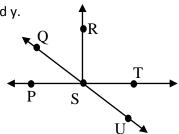
1. If m < PQR = 73 and  $m < PQS = x^2$ , and m < SQR = 85 - 8x, find m < SQR.



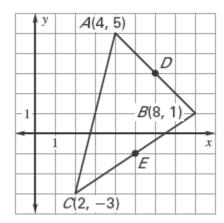
2. If m<RAM = 5x - 2 and m<MAT = 4x + 3, find m<RAT.  $\overline{AM}$  bisects <RAT.



3.  $\overline{RS} \perp \overline{PT}$ , m $\angle$ PSQ=(3x+8y)°, m $\angle$ QSR=(9x+y)° and m $\angle$ TSU=(5x+2y)° Find x and y.

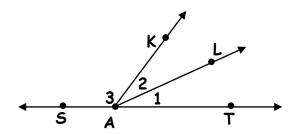


4. Find the length of the median  $\overline{CD}$ 



5.  $\overrightarrow{AL}$  bisects  $\angle$ KAT, m $\angle$ 2 = 3x+10, m $\angle$ 3 = 9x+40. Find x.





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  $\overline{LC}$ . If LA = x + 3 and AC = 6x, and LC = 80, then x = \_\_\_\_\_

9. Find x.

