

ST.MARGARET COLLEGE MAKERERE.

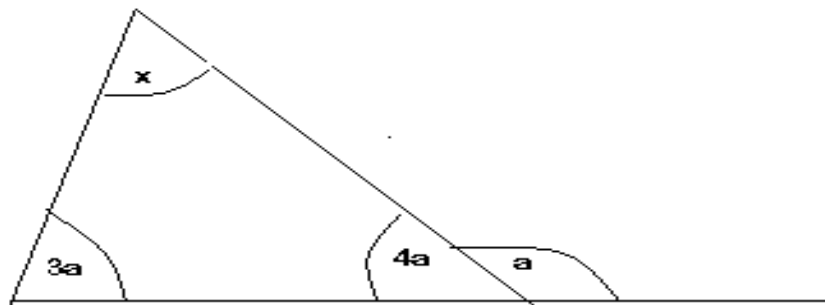
Name.....

S.1 TERM I EXAMS 2012
MATHEMATICS

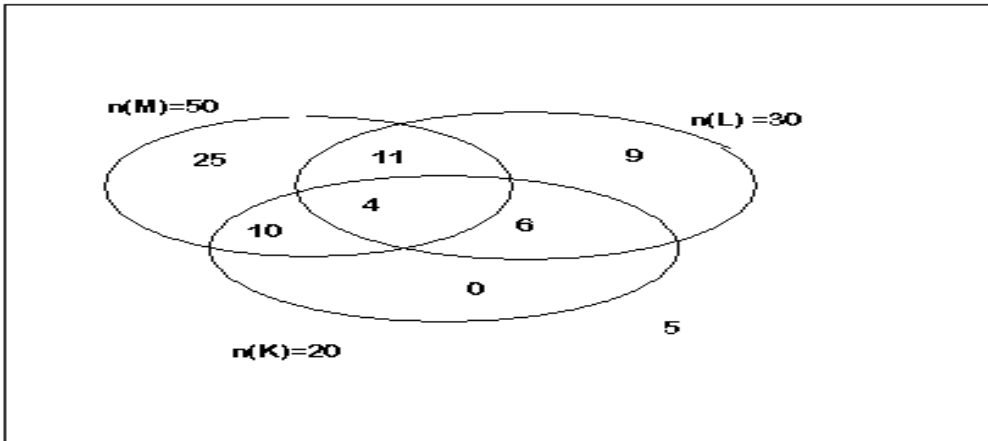
Time: 1 ½ HR

Instructions : - Attempt all questions
- Your working MUST be clearly shown

- If $a * b = (a + b)(a - b)$. Find
 - $(3 * 2)$
 - $(3 * 2) * (-1)$
- Find the LCM of 45, 72 and 24.
- Solve for x if $\frac{3x}{2} - \frac{2x - 5}{3} = 5$.
- Convert 110110_{two} to base ten.
- If $A = \{ \text{Triangular numbers less than 20} \}$
 $B = \{ \text{Prime numbers less than 20} \}$
Find (i) $n(A \cup B)$ (ii) $n(A \cap B) + n(B \cap A)$
- Evaluate the following;
 - $4324_{five} + 2344_{five}$
 - $54325_{six} \times 3$
- Write down an addition table for base 12.
- Evaluate $\frac{3}{4} \times \frac{4}{5} \div \frac{5}{8} + \frac{2}{3}$.
- Solve for a and x in the figure below



10. Use the venn diagram below showing the number of students who have been to Mukono, Lira and Kabale.



Find the number of students who have been to;

- (i) At least one of the towns
- (ii) At most two of the towns
- (iii) Only one of the towns
- (iv) The probability that a student picked at random has been to neither of the towns.

-END-

“Never give up”