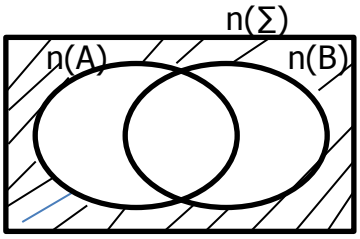
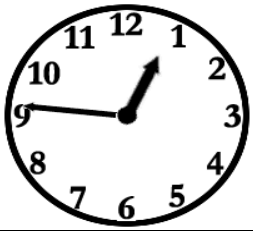
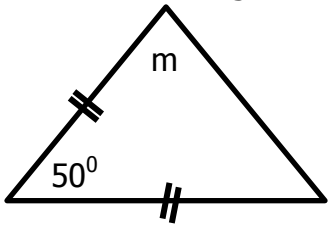
NAME: ..... TMT No.....

SECTION A

1. Answer all questions in this section.

2. Questions 1 to 20 carry two marks each.

1.	Add: 24 + 31	2.	Find the G.C.F of 8 and 12.
3.	Describe the unshaded region on the venn diagram below. 	4.	Simplify: $^{-}8 - {}^{-}6$
5.	Alex drove his car covering a distance of 60 Km in $1^1/_2$ hours. What was his speed in K.p.h?	6.	Use a protractor to draw an angle of 70^0.
7.	Given that a = – 2 and b = 2a. find the value of $a^2 + b$.	8.	What afternoon time is shown on the clock face below? 

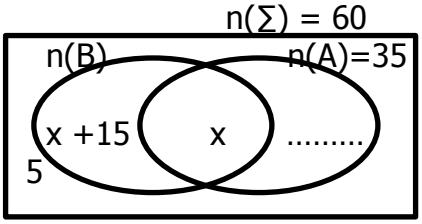
9.	Write 249.34 in words.(without using the word 'point')	10.	What is 25% of 4000kg?
11.	Draw tallies to represent 19.	12.	Find the size of angle marked with letter m. 
13.	Express 6 square metres as square centimetres.	14.	A box contains 6 blue balls, 3 yellow balls and 7 red balls. What is the probability of picking a ball at random which is not blue?
15.	Which number is written in expanded form to give; $\mathbf{(3 \times 10^{1}) + (4 \times 10^{0}) + (4 \times 10^{-2}) + (5 \times 10^{-3})?}$	16.	Solve for k: $25 - 5k = {}^{-}5$.

17.	A trader withdrew bank notes numbered consecutively from ***WT000400*** to ***WT000499***. If each note had a value of shs. 5,000, how much money did the trader withdraw?	18.	Use a dial to work out: 4 – 5 = ….(finite 7)
19.	Find the next fraction in the sequence below: **$^{1}/_{2}$, $^{2}/_{3}$, $^{3}/_{5}$, $^{4}/_{7}$, ...**	20.	Abraham had a wire $12^{1}/_{3}$m long. If he cut it into small pieces of a third of a metre long, how many pieces did he get?

SECTION B (60 Marks)

1. Answer all the questions in this section.

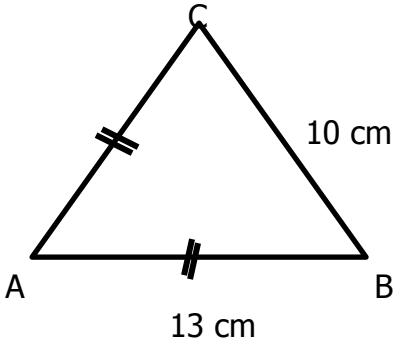
2. Marks for each question are indicated in the brackets.

21.a	Work out: $232_{five} + 44_{five}$ **(2 marks)**	b)	Express 202_{four} to ternary base system. **(2 marks)**
22.	Given that n(∑) = 60, n(A)' = 25 and n(B – A) = x + 15.		
a)	Use the information above to complete the venn diagram below.**(2 marks)**  	b)	Find the value of x. **(2 marks)**

c)	Find n(B)'. **(1 mark)**		
23.a	The mean of four consecutive even numbers is **28**. If their greatest is ***(y – 2),*** find the value of ***y.*** **(3 marks)**		
b)	Find the range of the numbers. **(2 marks)**		
24.a	Work out: 5555 ÷ 11 **(2 marks)**	b)	Find the value of $4^2 + 3^1 + 9^0$ **(3 marks)**

25. Using a pair of compasses, a ruler and a pencil only. Construct a regular hexagon of side 5.5cm in the space provided below. **(5 marks)**

26. The figure ABC below is an Isosceles triangle. Study it carefully and use it to answer questions that follow.



a) Find the perimeter of the figure ABC above. **(2 marks)**

b) Show the line of folding symmetry in the above figure. **(1 mark)**

c) Work out the area of the figure ABC. **(3 marks)**

27.a Maria is twice as old as Jorine. If their total age is 30 years, how old is Jorine? **(3 marks)**

b) Solve for w: $2(w + 3) = 12$. **(2 marks)**

28. If $\mathbf{PF_M = \{2_1, 3_1, 3_2\}}$ and $\mathbf{PF_{30} = \{2_1, 3_1, k\}}$

a) Find the value of k. **(2 marks)**

b) Find the value of M. **(2 marks)**

c) Work out the Lowest Common Multiple of **M** and **30**. **(2 marks)**

29. The table below shows marks scored by P.6 pupils in a test.

Number of pupils	***5***	***2***	***1***	***2***
Percentage mark	***60***	***70***	***50***	***65***

a) How many pupils sat for the test? **(1 mark)**

b) Find the median score in the test**. (2 marks)**

c)	How many pupils scored below the mean? **(2 marks)**
30	A motorist travelled at an average **speed of 80 K.p.h** for **2 hours**. He discovered he was too fast and reduced the **speed to 60 K.p.h** for **2 more hours**. What was his **average speed** for the **whole journey**? **(4 marks)**
31	Akampa buys the following items from JOJO supermarket every Saturday. **2 Kg of sugar at sh. 8,000.** **2 loaves of bread at sh. 4,800 each loaf.** **500g of Nescafe at sh. 7,000 each kilogram.** **A tin of blue band at sh. 5,000.**
a)	How much money does he spend every Saturday? **(3 marks)**

b)	If the cost of blue band was increased by 20%, how much money will he spend altogether the next Saturday he goes back to JOJO Supermarket? (**3 marks**)		
32.a	Work out: $\frac{0.8 \times 0.12}{0.2 + 0.4}$ **(3 marks)**	b)	Subtract: $^{3}/_{5} - {}^{1}/_{4}$ **(2 marks)**

**** END ****