STANDARD JUNIOR SCHOOL – ZZANA

MID – TERM ONE BREAK HOME TESTS, 2020
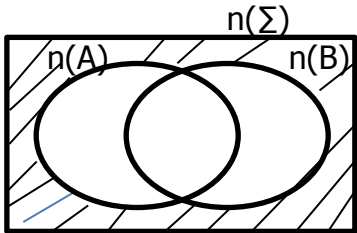P.7 MATHEMATICS, SET ONE
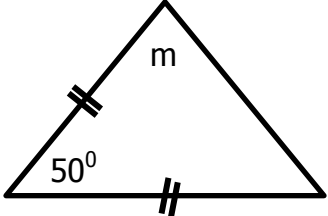
NAME: …………………………………………………….. **TMT No**…………………..

<u>**SECTION A**</u>
1. Answer all questions in this section.
2. Questions 1 to 20 carry two marks each.

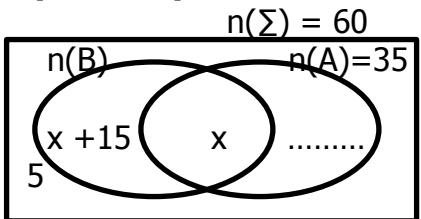|			
1.	Add: 24 + 31	2.	Find the G.C.F of 8 and 12.
3.	Describe the unshaded region on the venn diagram below. 	4.	Simplify: $^-8 - ^-6$
5.	Alex drove his car covering a distance of 60 Km in $1\frac{1}{2}$ hours. What was his speed in K.p.h?	6.	Use a protractor to draw an angle of 70^0.
7.	Given that 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; $(3 \times 10^{1}) + (4 \times 10^{0}) + (4 \times 10^{-2}) + (5 \times 10^{-3})$?	16.	Solve for k: $25 - 5k = {}^{-}5$.

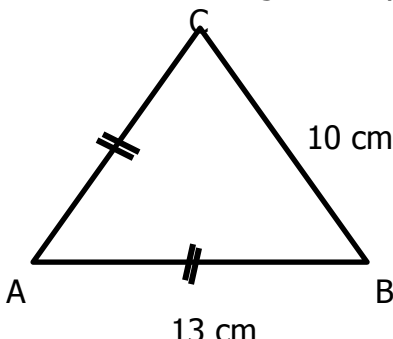| 17.	A trader withdrew bank notes numbered consecutively from **WT000400** to **WT000499**. If each note had a value of shs. 5,000, how much money did the trader withdraw?	18.	Use a dial to work out: $4 - 5 = $ ….(finite 7)
19.	Find the next fraction in the sequence below: $\frac{1}{2}, \frac{2}{3}, \frac{3}{5}, \frac{4}{7}, \ldots\ldots$	20.	Abraham had a wire $12\frac{1}{3}$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 $n(\Sigma) = 60$, $n(A)' = 25$ and $n(B - A) = x + 15$.		
a)	Use the information above to complete the venn diagram below.**(2 marks)** $n(\Sigma) = 60$ n(B)　　　n(A)=35 x +15　　x　　……… 5	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: $5555 \div 11$	**(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.

C

10 cm

A

13 cm

B

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 $PF_M = \{2_1, 3_1, 3_2\}$ and $PF_{30} = \{2_1, 3_1, k\}$

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: $\dfrac{0.8 \times 0.12}{0.2 + 0.4}$ **(3 marks)**	b)	Subtract: $^3/_5 - {}^1/_4$ **(2 marks)**

LET'S FIGHT CORONA VIRUS DISEASE TOGETHER!

1. Wash hands frequently with plenty of water and soap.
2. Sanitize your hands frequently if you can.
3. Avoid touching on soft parts of your face with unwashed hands.
4. Avoid crowded places or give a social distance of 4 metres.
5. Cover your nose and mouth when coughing or sneezing.
6. In case of any signs and symptoms of corona virus disease, seek medical attention on toll free number 0800100066 or 0800203033.

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