

RAAYAT ISLAMIC PRIMARY SCHOOL

MATHEMATICS – SET 2

Time Allowed 2 Hours 30 Minutes

Index No.

Random Number	Personal No.
_____	_____

Candidates' Name

Candidate's Signature.....

School Random No.

District ID:

Read the following instructions carefully:

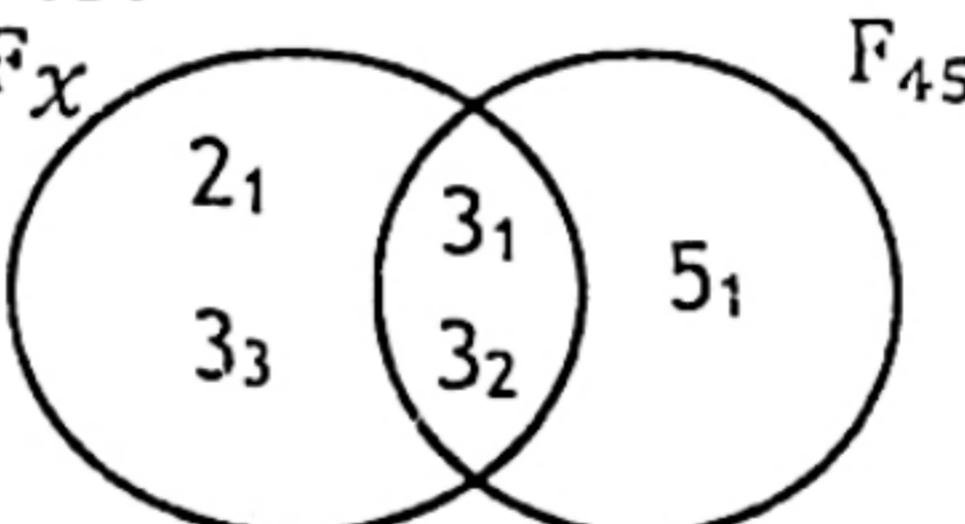
1. This paper has two section A and B
2. Answer all questions and all answers to both Sections A and B must be written in the spaces provided.
3. All answers must be written in blue or black ink ball-point pen or fountain pen.
4. Unnecessary changes of work may lead to loss of marks.
5. Any handwriting that cannot easily be read may lead to loss of marks.
6. Do not fill anything in the boxes indicated "For Examiners' Use Only" and those inside the question paper.

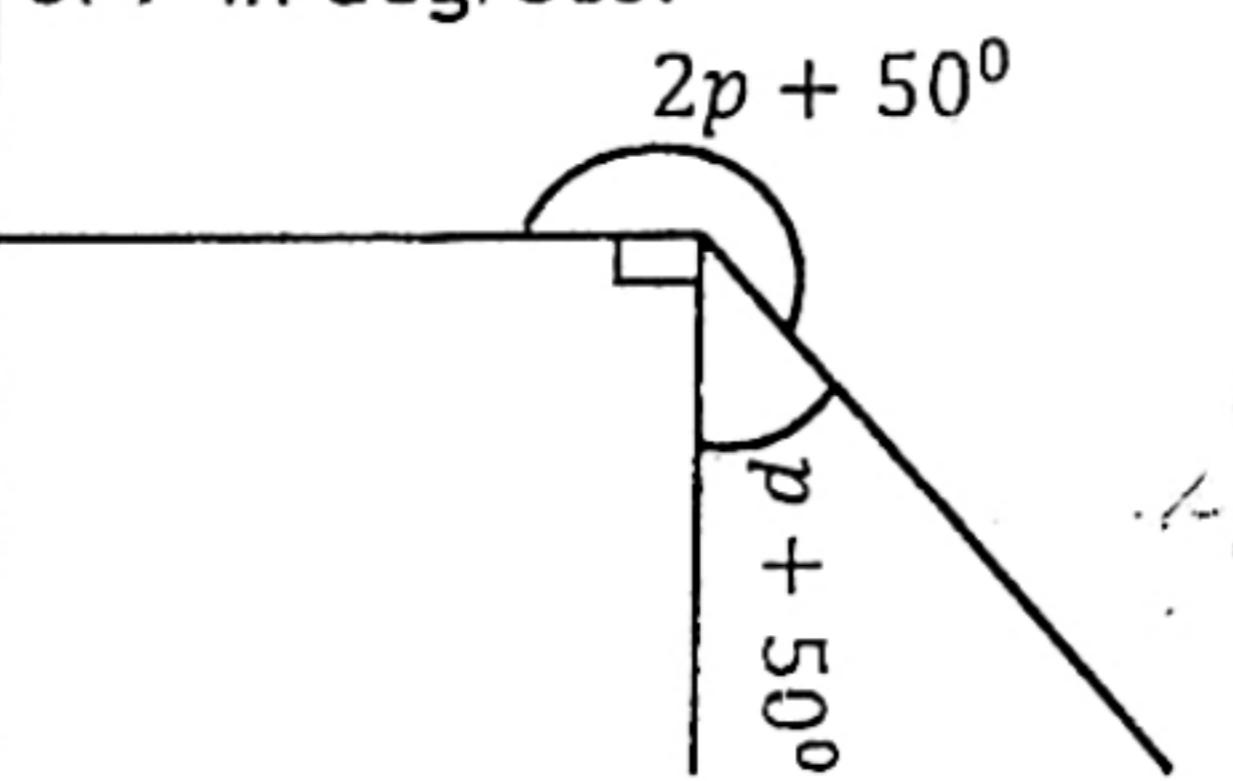
FOR EXAMINERS' USE ONLY

Qn.No.	Marks	EXR'S NO.
1-10		
11-20		
21-22		
23 - 24		
25 - 26		
27 - 28		
29 – 30		
31 – 32		
TOTAL		Scanned with MOBILE SCANNER

SECTION A (40MARKS)

Answer all questions in this section. Questions 1-20 carry two marks each.

1.	Work out: $91 - 0.9$	2.	Simplify: $a^2 - a + 2a^2 - 3a$
3.	Find the number that has been expanded to give $(4 \times 10^4) + (6 \times 10^2) + (3 \times 10^{-2})$	4.	Given that: $A = \{\text{Prime numbers less than } 15\}$ $B = \{\text{Triangular numbers less than } 15\}$ Find $n(B - A)$
5.	Round off 4.963 to the nearest tenth.	6.	Write 946 in Roman numerals.
7.	Using a pair of compasses a ruler and a pencil only, construct an angle of 75° in the space below.	8.	The Venn diagram shows prime factors of x and 45.  Use the Venn diagram given above to find the value of x .
9.	A wedding party which lasted for $4\frac{2}{3}$ hours ended at 8:15 P.m. When did the party start?	10.	Tea is sold in packets of 250g. How many packets can be made from $4\frac{1}{2}$ kg of tea?

11.	<p>A bus park has 345 rows and each row has 48 parking spaces. How many buses can be parked in the park?</p>	12. If $x = -3$, $y = 1$ and $z = -4$, find the value of $\frac{2y-xz}{y^2-z}$.
13.	<p>Mujasi deposited sh.1,200,000 in a bank for 4 years and earned an interest of sh.156,000. What was the rate of the interest per annum?</p>	14. In a class, there are 74 boys and 46 girls. What is the probability that a pupil selected at random is a boy?
15.	<p>In the figure below, find the value of P in degrees.</p> 	16. If this month is march, what month of the year was it 42 months ago?
17.	<p>Julius bought a sack of rice for sh.335,000. He later sold it making a loss of sh.45,500. What was his selling price?</p>	18. The perimeter of the semi - circle below is 72cm. Find the diameter of the semi - circle. ($\text{Take } \pi = \frac{22}{7}$) 

19. A car takes 2hrs 24minutes to cover a distance of 180km. How long does it take to cover 120km?
20. The following are marks obtained by some pupils in a mathematics test.
71, 82, 73, 88, 84, 68, 80.
Find the median mark.

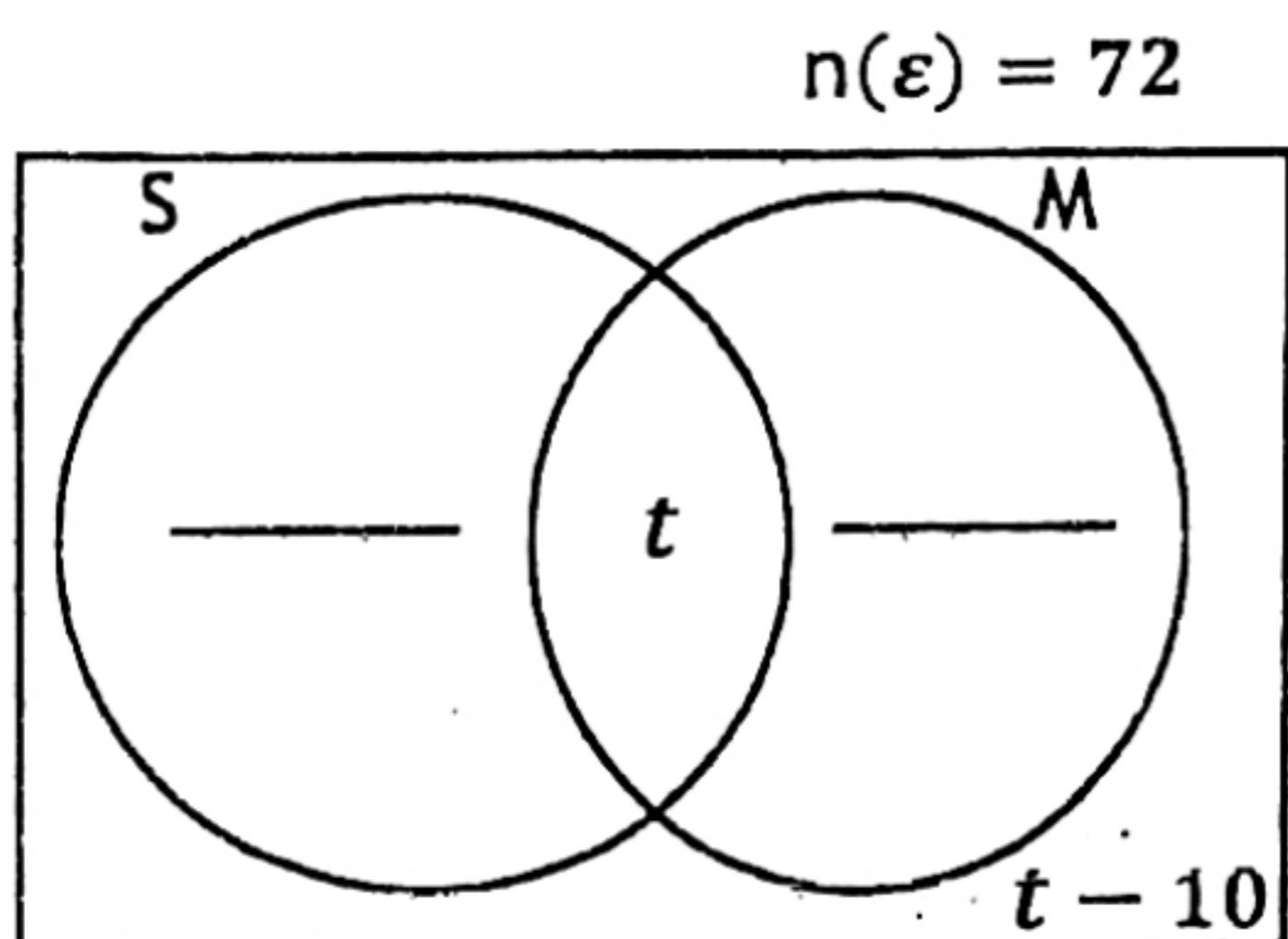
SECTION B (60MARKS)

Marks for each part of the question are indicated in brackets

21. (a) Simplify:
$$\frac{8K^3 \times 6K^4}{12K^5}$$
 (02marks)
- (b) Solve: $7^{2n} \times 7^4 = 1$ (03marks)
22. Use the figure below to answer the questions that follow.
-
- (a) Solve for the value of m in degrees (02marks)
- (b) Find the size of angle marked PQS . (03marks)

23. A school has a teaching staff of 72 teachers. 55 teach social studies (S), $(t - 17)$ teach mathematics (M) but not Social studies. t teach both Social studies and Mathematics while $(t - 10)$ do not teach any of the two subjects.

(a) Use the information given above to complete the Venn diagram below. (02marks)



(b) Find the value of t . (02marks)

(c) If a teacher is picked at random, what is the probability that the teacher teaches only one subject? (01mark)

24. (a) Using a pair of compasses, a ruler and a sharp pencil only, construct a triangle ABC , where line $AB = 7.2\text{cm}$, angle $ABC = 135^\circ$ and line $BC = 8\text{cm}$ (04marks)

(b) Measure line \overline{AC} . (01mark)

25. Kasujja is 60 years. Kasakya is 24 years old.
(a) After how many years will Kasakya be half as old as Kasujja? (03marks)
- (b) How old will Kasakya be then? (02marks)
26. In a school of 900 pupils, 60% of them are girls and the rest are boys. If 30% of the boys and 40% of the girls were registered by NIRA.
(a) Find the number of boys in the school. (02marks)
- (b) How many pupils were registered by NIRA? (03marks)
27. A cyclist riding from Busi village arrived in Wakiso town at 12:30P.m. if the journey took 50 minutes,
(a) At what time did the cyclist leave Busi? (02marks)
- (b) If the village is 60km away from Wakiso town, calculate the average speed of the cyclist in metres per second. (03marks)

28. The rates at which a bank buys and sells foreign currencies are given in the table below. Study it and use it to answer the questions that follow.

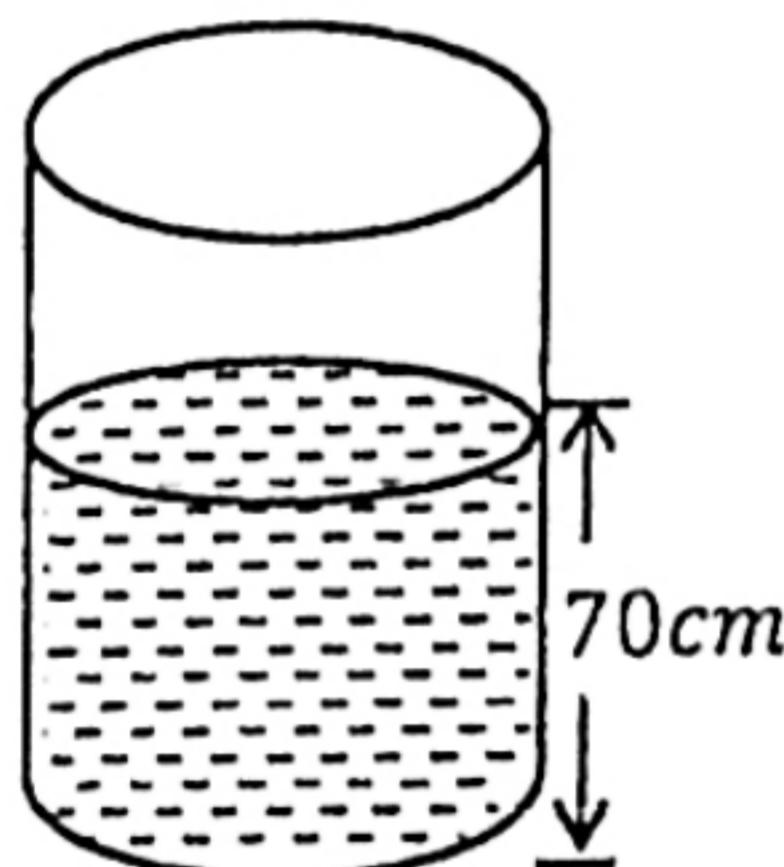
Currency	Buying rate	Selling rate
1 US dollar (\$)	Ugsh. 3,600	Ugsh. 3,700
1 Pound sterling (£)	Ugsh. 4550	Ugsh. 4650
1 Kenya shilling (Ksh)	Ugsh. 35	Ugsh. 36

(a) If Byamukama has £ 3500, how much money in Uganda shillings will she get from the bank? (02marks)

(b) If Kasawuli has Ksh.22,200, how many dollars will he get from the bank? (03marks)

29. The diagram below is a cylindrical tank containing 10.78 litres of water.

(a) Find the radius of the tank. (Take $\pi = \frac{22}{7}$) (03marks)



(b) If the tank is $\frac{3}{7}$ full of water, find the capacity of the tank. (02marks)

30. The table below shows the ages of children in a certain home.

Age in years	3	4	6	7	9	10
No. of children	2	1	3	8	W	2

(a) If the mean age of the children is 7years, find the value of W. (04mark)

(b) How many children are in that home?

(01mark)

31. Ssenabulya went for shopping and bought the following items.
3kg of rice at sh.3400 per kg, 500ml of milk at sh.3600 per litre, 24 mangoes at
sh.800 for every 30 mangoes, 2kg of beans at sh.5600.

(a) Find the total cost of the above items.

(04marks)

(b) If he paid sh.11,600 for all the items after a discount was offered.

Work out the discount

(01mark)

32. (a) Find the value of K .

$$4 \div 7 = K \pmod{12}$$

(02marks)

(b) The head teacher had some books. When she shared them equally among
4 pupils, one book remained. When she shared them equally among
7 pupils, 3 books remained. How many books did the head teacher have?

(03marks)