



**THE DESTINY ACADEMIC RESEARCHERS CONSULTANCY - KAMPALA**

**PRIMARY LEAVING SPECIAL MOCK EXAMINATION 2024  
MATHEMATICS**

**Time allowed: 2 hours 30 minutes**

**Index No.**

Random No.						Personal No.		

**Candidate's name:** .....

**Candidate's signature:** .....

**School Random number:** .....

**District No.**

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**Read the following instructions carefully:**

1. Do not write your **school** or **district name** anywhere on this paper.

2. This paper has two sections: **A** and **B**.

Section **A** has **20** questions and section **B** has **12** questions. The paper has **12 printed papers** altogether.

3. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.

4. **All** working must be done using a **blue** or **black** ball point pen or ink. Any work done in pencil other than graphs and diagrams will **NOT** be marked.

5. **No calculators** are allowed in the examination room.

6. Unnecessary **changes** in your work and handwriting that cannot easily be read may lead to loss of marks.

7. Do not fill anything in the table indicated:  
**"For examiners' use only"** and the boxes inside the question paper.

FOR EXAMINER'S USE ONLY		
Qn. No.	MARKS	EXR'S NO.
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

**SECTION A**  
**Questions 1-20 carry 2 marks each**

1. Divide:  $3636 \div 12$

2. Solve  $3y + 2 = 23$

3. Change  $13_{\text{ten}}$  to binary

4. Simplify;  $2y + 4x - 2x + y$

5. A pot contains  $9\frac{1}{2}$  litres of water. How many half litre bottles will the water fill?

6. Find the complement of  $(n+30)^\circ$ .

7. What is the next number in the sequence: 29, 21, 14, 8, 3, \_\_\_\_\_

8. Jamada has a bundle of five-thousand-shilling notes numbered in order from AH565705 to AH565805. How much money does he have altogether?

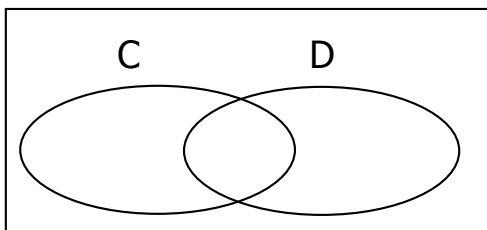
9. In a class there are 14 boys and 12 girls. If a pupil is picked at random to sweep the classroom, what is the probability that the pupil picked is a girl?
10. Three pencils cost shs 1200. Find the cost of 9 pencils.
11. A rectangle is 8m by 6m. Find the length of the diagonal.
12. Asiimwe deposited shs 500,000 in Stanbic bank which offers an interest of 30% per year. How much will Asiimwe have in the bank after six months?

13. Kintu's speed is 90km per hour. Express this in metres per second.
14. Express 0.1212..... as a fraction in its lowest form.
15. Using a pair of compasses, ruler and a pencil, construct an angle of  $150^{\circ}$ .
16. Find the value of p:  $-2p + 4 > 6$
17. Write XCIV in Hindu Arabic numerals.

18. The exterior angle of a regular polygon is  $45^\circ$ . Name the polygon.

19. Find the square root of  $5\frac{4}{9}$ .

20. In the diagram below, shade  $(C \cup D)^I$



## SECTION B

**Answer all questions in this section.**

**Marks for each question are indicated in brackets.**

21. The table below shows marks scored by pupils in a mathematics test. Use it to answer the questions that follow

<b>Marks scored</b>	70	40	30	50
<b>Number of pupils</b>	1	2	4	3

(a) How many pupils did the test? (1mk)

(b) What was the median mark? (2mks)

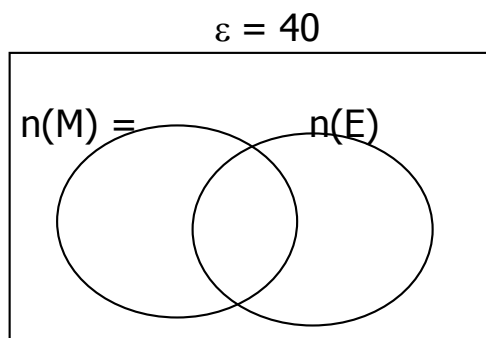
(c) Calculate the mean mark. (2mks)

22. Okwi divided his money among his daughters; Alice, Akello, Angella in ratio 5:3:7 respectively. If Akello got shs 300,000 how much did the others each get?(4mks)

23. Okello rolls a wheel of a diameter 70cm through a distance of 300 metres. How many complete revolutions does the wheel make?(5mks)

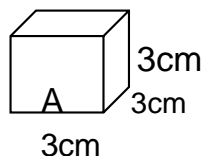
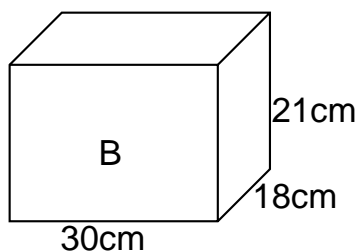
24. In a class of 40 pupils, 25 like Mathematics (M), 19 like English (E), w pupils like both and 3 don't like any of the subjects.

- (a) Represent the information on a venn diagram. (3mks)



- (b) How many pupils like both subjects? (2mks)

25. Below is a cube A and box B. Isabirye packs Tayari curry powder in cubes and packs them in a box for export to Nairobi.



- (a) Find the number of cubes that can fit into box B. (2mks)



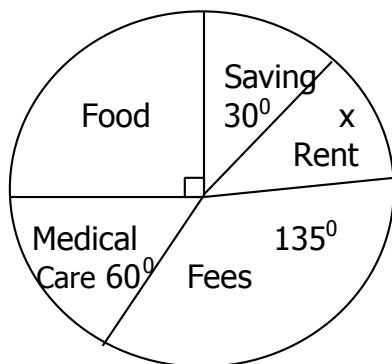
- (b) Calculate the space left empty after filling the box with cubes of curry power. (3mks)

26. Solve:

(a)  $\frac{1}{2}r + 7 = 2r - 2$  (2mks)

(b)  $\frac{10}{2} + 2 = 22$  (2mks)

27. The pie chart below shows how James spends his monthly salary.



- (a) If he spends shs 150,000 on rent, find his salary.

- (b) Work out the money he spends on food.

(c) How much more money does he spend on fees than on medical care?

28. Jomi went to buy the following items from a wholesale shop so as to bring and sell them in his retail shop.

50kg of sugar at shs 250,000

20 litres of cooking oil at shs 100,000

25 bars of soap at shs 50,000

(a) If he wants to get a profit of 20% from sugar, at what retail price will he sell a kg of sugar? (2mks)

(b) If he sells the cooking oil at shs 6,000 per litre, what would be his profit?  
(2mks)

(c) Jomi sold the soap and made a loss of 10%. What was his selling price for a bar of soap?  
(2mks)

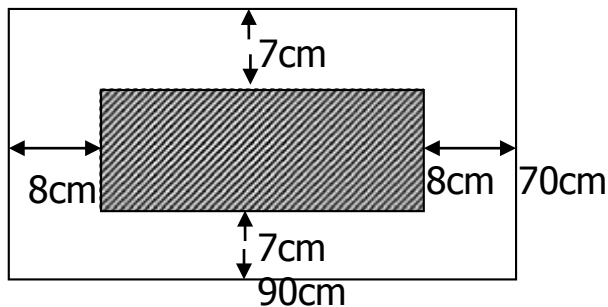
29a) Simplify:  $\frac{0.27 \times 0.006}{0.9 \times 0.3}$

(3mks)

- (b) A radio uses batteries of 1.5 volts. In order for the radio to work it requires 12 volts. How many such batteries will the radio require? (2mks)

30. Out of 5,200,000 candidates who sat for P.L.E in a 2023, 30% were girls and the rest were boys, 80% of the girls passed the exam and 10% of the boys failed the exam. How many candidates passed the exam? (6mks)

31. A piece of cloth is laid on a table 90cm long and 70cm wide as shown in the figure below. The area covered by the piece of cloth is shaded.



- (a) Find the length and width of the piece of cloth.(2mks)

- (b) Calculate the area of the table which is not covered by the piece of cloth.  
(3mks)

32. A ship left Port A for port B on a bearing of  $090^{\circ}$ . It sailed for 100km then changed its course and sailed on a bearing of  $140^{\circ}$  for 80km before reaching Port B.

- (a) Draw a sketch diagram for the journey. (1mk)

- (b) Using a scale of 1cm to represent 10km, draw an accurate diagram of the whole journey.  
(4mks)

**END**