



NERDS EXAMINATIONS BOARD

P7 BEGINNING OF TERM ONE EXAM 2025

MATHEMATICS

Time allowed: 2 hours 30 minutes

Candidate's name:

Candidate's signature:

Read the following instructions carefully;

1. This paper has two sections: **A** and **B**.
Section **A** has **20** questions and section **B** has **12** questions.
2. Answer **all** questions. **All** the answers for both sections **A** and **B** must be shown in the spaces provided.
3. **All** working must be done using a **blue** or **black** ball point pen or ink. Any work done in pencil will **NOT** be marked except drawings and diagrams.
4. Unnecessary **changes** in your work and handwriting that cannot easily be read may lead to loss of marks.
5. Do not fill anything in the table indicated: "**For examiners' use only**" and the boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn. No.	MARKS	EXR'S NO.
01 - 05		
06 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 32		
TOTAL		

SECTION A (40 MARKS)

Question 1 to 20 carry two marks each

1. Solve $2+k = 1$

2. Express 750g as a fraction of 2kg.

3. Theresa is 29 years old. Express his age in Roman Numerals.

4. Convert 1011_{two} to base ten.

5. Given that set $P = \{\text{All composite numbers between 4 and 14}\}$. Find $n(P)$.

6. Simplify $2m - 2k + 3k - 5m$

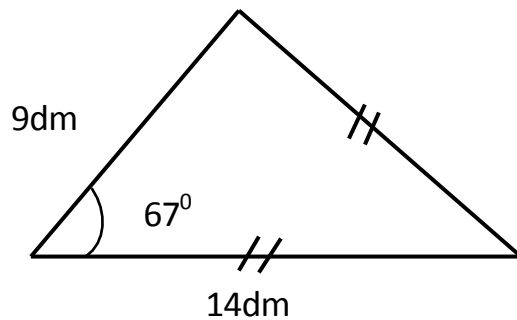
7. Work out: $2\frac{2}{5} + 1\frac{1}{3}$

8. The cost of 9 pencils is sh. 8,100. How many similar pencils can cost sh. 4,500?

9. If $z = 7$, $b = 5$ and $y = z - 2$. Evaluate $2z - 6y$

10. Construct an angle of 45° in the space provided below using a ruler, pencil and a pair of compasses.

11. Find the perimeter of the figure below.



12. A lesson of 45 minutes started at 8:15 pm. At what time did it end?

13. Work out the value of 9 in 47.09.

14. In a class of 30 pupils, boys are 10% of the whole class. How many girls are in the class?

15. Use a number line to work out $-3 - -9$.

16. Find the average of 8, 0, and 1.

17. Divide 912 by 3.

18. Calculate the sum of all prime numbers that are factors of 15.

19. At what speed must a cyclist ride to cover 80 km in $2\frac{1}{2}$ hrs?

20. Write "Ten thousand forty nine" in figures.

SECTION B (60 MARKS)

21 a) Solve $2(y-1) - (y-1) = 14$ (2 marks)

b) Find the value of n if $47n = 133$ _{five} (2 marks)

22 a) Subtract: $4.5 - 0.09$ (2 marks)

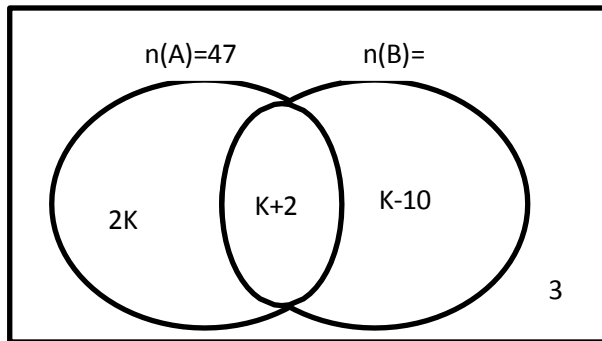
b) Simplify 0.28×14 (3 marks)

23 Agaba is 15 years older than Ashaba. If their total age is 35 years,

a) How old is each now? (3 marks)

b) Find their total age 15 years after (2 marks)

24. Study the Venn diagram below and use it to answer the questions that follow.



a) Find the value of K (2 marks)

b) Work out,

i) $n(B)$ (2 marks)

ii) $n(A')$ (2 marks)

25.a) Express 40m/s to km/hr

(2mks)

b) A baby slept at 7:10 pm and woke up at 6:25 am the following day.

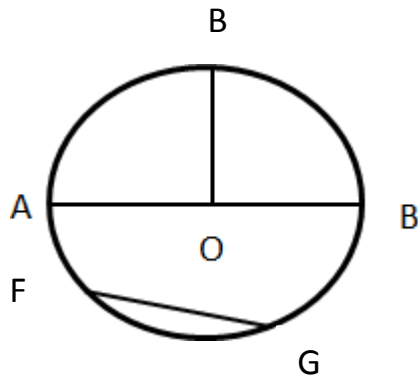
For how long did the baby sleep? (2mks)

26. A farmer used his land as follows: $\frac{1}{4}$ of it to grow tomatoes, $\frac{2}{5}$ of it to rear animals and the rest for growing cash crops. Represent the above information on a circle graph of radius 5cm. (6 marks)

27. a) Work out the product of the next two numbers in the sequence below: 1, 8, 27, 64, __, __ (2mks)

b) The sum of 3 consecutive even numbers is 60. Find the middle number. (3 marks)

28. Study the diagram below and use it to answer questions that follow:



a) Name the figure shown on the diagram (1mk)

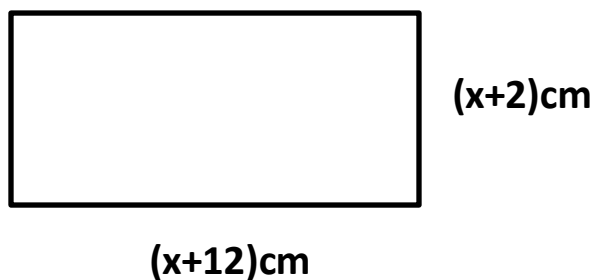
b) Give a mathematical name for line

AB:.....

FG:

DC:

29. Below is a rectangle. Use it to answer questions that follow.



a) Find the value of x if the distance round the rectangle above is 36cm

c) Calculate its area (2mks)

30. The following goals were scored by a certain football team in a series of matches: 7, 6, 3, 7, 4, 2, 5 and 7

a) What was the modal score? (1mk)

d) Find their median score (2mks)

c) Calculate the mean number of goals scored (2mks)

31. Jessica went for shopping and bought the following items:

4 bars of soap at sh. 16,000

3 kg of sugar at sh. 3900 per kilo

A packet of crayons at sh. 1800

8 pens at sh. 700, a pen

2 liters of cooking oil at sh. 2800

If she had sh. 50,000, how much did she remain with? (5 marks)

32. Ramadan saved sh. 360,000 in a bank which offers a simple interest rate of 10% per year.

a) Calculate his interest after 36 months (3marks)

b) How much money will he have in the bank after 36 months?

(2 marks)

END