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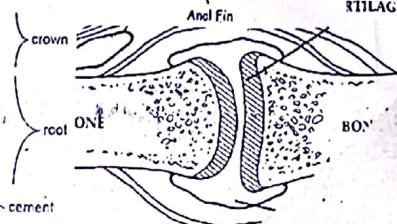
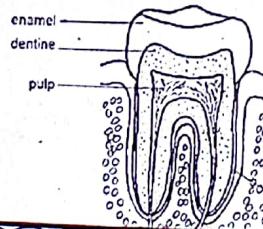
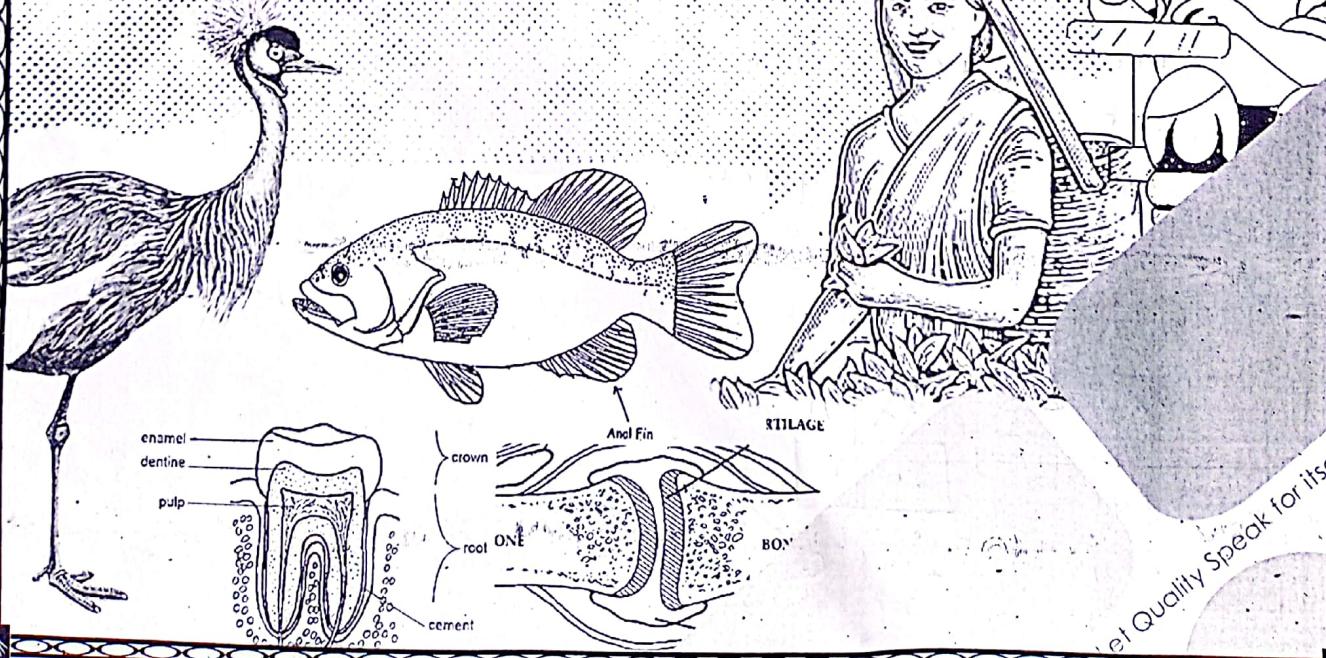
# SUREKEY

EXAMINATIONS BOARD

## MATHEMATICS

Official Marking Guide

P.4 QUALITY CHECK FOUR  
2024



## SECTION A: 40 MARKS

Answer all questions in this Section  
Questions 1 to 20 carry two marks each

1. Workout: 364

$$\begin{array}{r} 364 \\ - 153 \\ \hline 211 \end{array}$$

2. Find the next number in the sequence below.

$$14, 17, 19, 22, 24, \dots, 27, \dots, 29.$$

$+3$      $+2$      $+3$      $+2$      $+3$      $+2$      $+3$   
 $24+3=27$      $27+2=29$

3. If set B = {a, e, t, w} and Q = {4, 5, 6, 7}. Write a mathematical statement showing the relationship between set B and Q.

4. Convert 4200cm into metres.

$$\begin{aligned} 100\text{cm} &\Rightarrow 1\text{m} \\ 4200\text{cm} &\Rightarrow \frac{4200}{100}\text{m} \\ 4200\text{cm} &\Rightarrow 42\text{m}. \end{aligned}$$

5. Given that  represents 9 apples. Find the number of apples represented by 

$$\begin{aligned} 1\text{pc} &\Rightarrow 9\text{ apples.} \\ 5\text{pc} &\Rightarrow 5 \times 9 \\ 5\text{pc} &\Rightarrow 45\text{ apples.} \end{aligned}$$

6. Write XXVI in Hindu Arabic numerals.

$$\begin{array}{l} \text{XXVI} = \\ \text{XXVI} \end{array} \quad \begin{array}{|c|c|} \hline \text{XX} & \text{VI} \\ \hline 20 & 6 \\ \hline \end{array}$$

$$\text{XXVI} = 20 + 6$$

$$\text{XXVI} = 26$$

2

7. Find the Greatest Common Factor (GCF) of 12 and 9.

<u>2</u>	12	9
	4	8

GCF = 3

OR  
 $F_{12} = \{1, 2, 3, 4, 6, 12\}$   
 $F_9 = \{1, 3, 9\}$   
 $GCF = 3$

8. Share 24 biscuits among 3 girls equally.

$$\begin{array}{r} 2 \\ \overline{)24} \\ 2 \quad 4 \\ \hline 0 \end{array}$$

8 biscuits.

$$\begin{array}{r} 0 \quad 8 \\ 3 \overline{)24} \\ 2 \quad 4 \\ \hline 2 \quad 4 \\ \hline 0 \quad 0 \end{array}$$

8 biscuits.

$$3 \times 0 = 0$$

$$24 \div 3 = 8$$

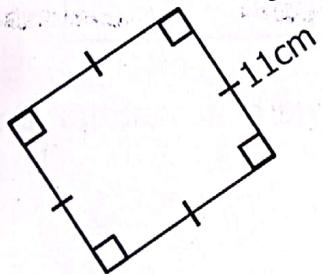
9. Nathan and his four friends have Sh.3,200 each. How much money do they have altogether?

Total amount  $\Rightarrow$

$$\begin{array}{r} \text{Sh } 3200 \\ \times \quad 5 \\ \hline \text{Sh } 16000 \end{array}$$

$$\begin{array}{r} \text{Sh } 3200 \\ + \text{Sh } 3200 \\ \hline \text{Sh } 16000 \end{array}$$

10. Find the area of the geometric figure.



$$A = s \times s$$

$$A = 11 \text{ cm} \times 11 \text{ cm}$$

$$A = 121 \text{ cm}^2$$

11. Find the number which is missing in the box.

$$\boxed{\phantom{0}} = 5$$

$$\boxed{\phantom{0}} \times 4 = 5 \times 4$$

$$= 20$$

3

Turn Over

12. The cost at which a box of chalk is bought is Sh.5,000. Calculate the cost of buying 6 similar boxes of chalk.

$$\begin{array}{r} 1 \text{ box} = \text{Sh} 5000 \\ 6 \text{ boxes} = \text{Sh} 5000 \\ \times \quad 6 \\ \hline \text{Sh} 30000 \end{array}$$

13. The taxi took 3 hours travelling. What is this time in minutes?

$$\begin{array}{r} 1 \text{ hour} = 60 \text{ min} \\ 3 \text{ hours} = 3 \times 60 \text{ min} \\ 3 \text{ hours} = 180 \text{ min} \end{array}$$

14. Workout:  $\frac{5}{8} - \frac{3}{8}$

$$\begin{array}{r} \frac{5-3}{8} \\ \hline \frac{2}{8} \\ \hline \frac{2}{8} \end{array}$$

15. The upper section of Bethel Primary School comprises 163 pupils. One Monday some pupils who were absent are shown in the table below.

Class	P.7	P.6	P.5
Pupils	6	9	11

How many pupils in upper section were present that day?

No. of pupils absent

$$6 + 9 + 11$$

$$15 + 11$$

$$26$$

No. of pupils present

$$163$$

$$- 26$$

$$\hline 137 \text{ pupils.}$$

16. Workout: Weeks Days

$$\begin{array}{r} 3 \quad 11 \\ - 1 \quad 6 \\ \hline 2 \quad 5 \end{array}$$

17. Akiya is 3 years older than Ella who is 5 years. Find the product of their ages.

$$\text{Akiya} = (3+5) \\ \text{8 years.}$$

$$\text{Ella} = 5 \text{ years}$$

$$\text{product} = 8 \times 5 \\ \text{40 years.}$$

18. Use  $>$  or  $<$  to complete the statements below.

$$(i) \quad 6 + 3 \underset{9}{\text{<}} 6 \times 3 \underset{12}{\text{<}}$$

$$(ii) \quad 1 \text{ kg} \underset{1000 \text{ g}}{\text{<}} 800 \text{ g} \underset{800 \text{ g}}{\text{<}}$$

19. Children went to an animal farm for animal study. They counted 20 sheep, 12 cows and 10 goats. Find the total number of legs all the animals have?

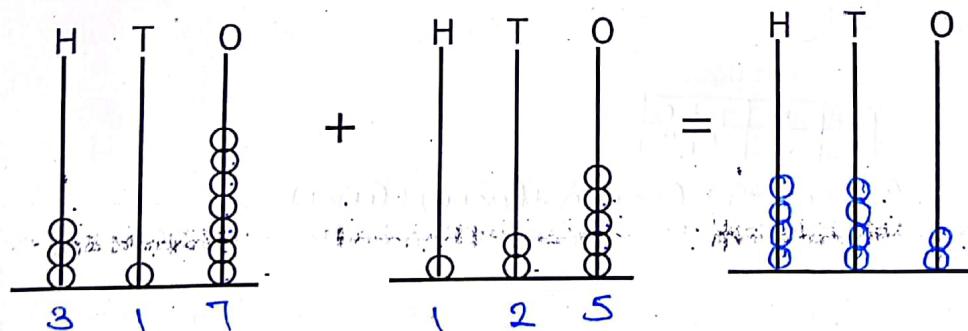
$$(20 \times 4) + (12 \times 4) + (10 \times 4)$$

$$80 + 48 + 40$$

$$80 + 88$$

$$168 \text{ legs.}$$

20. Workout the addition shown on the abaci below and represent the answer on the third abacus.



$$\begin{array}{r} 317 \\ + 125 \\ \hline 442 \end{array}$$

## SECTION B: 60 MARKS

Answer **all** questions in this section

Marks for each question are indicated in brackets.

21. Use the sets **G** and **H** below to answer the questions that follow.

$$G = \{3, 5, 6, 7, 9\}$$

$$H = \{2, 3, 5, 7, 11, 13\}$$

- a) Find  $n(G \cap H)$

$$G \cap H = \{3, 5, 7\}$$

$$n(G \cap H) = 3.$$

(02 Marks)

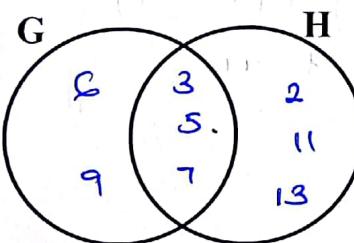
- b) List down all the elements of Set  $(G \cup H)$

$$G \cup H = \{3, 5, 6, 7, 9, 11, 13\}$$

(01 Mark)

- c) On the Venn diagram below, represent the sets **G** and **H**.

(03 Marks)



22. a) Write the place value of 3 from the numeral 6374.

(01 Mark)

TH	5	I	0
6	3	7	4

↓ Hundreds.

- b) Write the numeral in (a) above as an expanded number using place values.

(02 Marks)

TH	5	I	0
6	3	7	4

$$(6 \times 1000) + (3 \times 100) + (7 \times 10) + (4 \times 1)$$

- c) Work out the product of 6 and the place value of 3 from the numeral above.

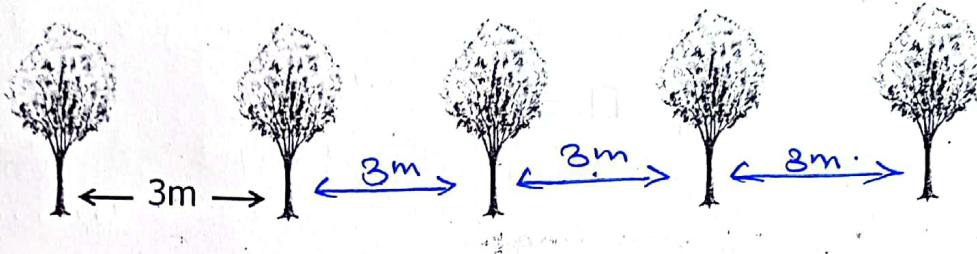
(02 Marks)

place value of 3.  
3 × 100

$$\begin{array}{r}
 \text{product} \\
 3 \times 100 \\
 \hline
 300
 \end{array}$$

6

23. A man planted 5 trees in a row along one side of his land 3 metres apart from the first to the last tree!



- a) Find in centimetres (cm), the total distance from the first to the last tree. (03 Marks)

$$\begin{aligned} \text{Total distance} &= 3m \times 4 \\ &= 12m. \\ 1m &= 100 \text{ cm.} \\ 12m &= 12 \times 100 \text{ cm} \\ &= 1200 \text{ cm.} \end{aligned}$$

- b) If two more trees are planted in the same line, find the total distance from the first to the last tree. (02 Marks)

$$\begin{aligned} (3m + 3m + 3m + 3m) + (3m + 3m) \\ 12m + 6m \\ 18m. \end{aligned}$$

24. Opio rode his bicycle and covered  $\frac{4}{11}$  of the journey before his bicycle got a flat tyre. He then walked  $\frac{5}{11}$  of the journey.

- a) What fraction of the journey did Opio cover? (02 Marks)

$$\begin{aligned} \frac{4}{11} + \frac{5}{11} &= \frac{4+5}{11} \\ &= \frac{9}{11} \end{aligned}$$

- b) Find the fraction of the journey left uncovered. (02 Marks)

$$\begin{aligned} \frac{11}{11} - \frac{9}{11} &= \frac{11-9}{11} \\ &= \frac{2}{11} \end{aligned}$$

25. a) Find the numbers in the box.

(02 Marks)

$$\boxed{3} \times 4 = 12$$

$$\begin{array}{r} 12 \\ \times 3 \\ \hline 36 \end{array}$$

$$\square = 3$$

b) If  $a = 5$  and  $b = 6$ . Find the value of;

(02 marks)

$$\underline{a \times b}$$

$$\underline{3}$$

$$\underline{5 \times 6}$$

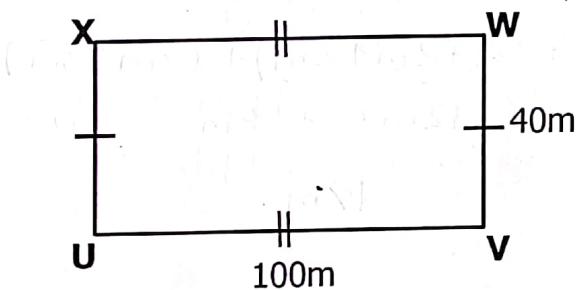
$$\begin{array}{r} 3 \\ \times 6 \\ \hline 18 \end{array}$$

$$= \underline{30}$$

$$\begin{array}{r} 3 \\ \times 6 \\ \hline 18 \\ + 3 \\ \hline 30 \end{array}$$

$$= 10$$

26. The figure **UVWX** below shows a playground used during athletics activities. Use it to answer the questions that follow.



a) If an athlete ran 4 times round the playground above, find the total distance he covers in metres. (03 Marks)

$$P = 2(L+W)$$

$$= 2(100\text{m} + 40\text{m})$$

$$= 2 \times 140\text{m}$$

$$= 280\text{m}$$

Total distance covered

$$= 4 \times 280\text{m}$$

$$\begin{array}{r} 280 \\ \times 4 \\ \hline 1120 \end{array}$$

$$= 1120\text{m}$$

b) Work out the area of the playground above. (02 Marks)

$$A = L \times W$$

$$A = (100 \times 40)\text{ (m}^2\text{)}$$

$$A = 4000\text{ m}^2$$

27. The tallies below represent the boys and girls in P.4 class at Hope Nursery & Primary School.

Pupils	Tallies
Girls	
Boys	

- a) How many girls are in the class? (01 Mark)

$$5 + 5 + 5 + 2 \\ = 17 \text{ girls}$$

- b) Find the total number of pupils in the class. (02 Marks)

$$5 + 5 + 4 \\ = 14 \text{ boys}$$

$$\text{Total} = 17 + 14 \\ = 31 \text{ pupils}$$

- c) One day, 8 boys and 4 girls were absent. Draw Pictos to represent the pupils present that day. (02 Marks)

Pupils absent

$$8 + 4 \\ = 12 \text{ pupils}$$

Pupils present

$$31 - 12 = 19 \text{ pupils}$$

Pictos / Tallies

|||| ||| | | | |

28. Joan was born in 2003 and his brother John was born 5 years later.

- a) In which year will Joan celebrate her 19<sup>th</sup> birthday? (02 Marks)

$$\begin{array}{r} 2003 \\ + 19 \\ \hline 2022 \end{array}$$

She will celebrate her 19<sup>th</sup> birthday in 2022.

- b) How old will John be when Joan celebrates her 19<sup>th</sup> birthday?

Year John was born

$$\begin{array}{r} 2003 \\ + 5 \\ \hline 2008 \end{array}$$

Age

$$\begin{array}{r} 2022 \\ - 2008 \\ \hline 014 \end{array}$$

He will be 14 years

29. Below is how 37 sweets were distributed to three children.

Jane → 12 sweets

Denis → 3 sweets more than Jane

Vianney →  $\frac{1}{3}$  of Jane's sweets

a) How many sweets did Vianney get? (02 Marks)

$$\begin{array}{r} 1 \\ \times 12 \\ \hline 12 \\ 1 \\ \hline = 4 \text{ sweets} \end{array}$$

b) How many sweets remained after all children getting their share? (03 Marks)

$$\begin{array}{r} \underline{\text{Denis}} = 12 + 3 \\ = 15 \text{ sweets} \end{array}$$

$$\begin{array}{r} \underline{\text{Total}} = 15 + 4 + 12 \\ = 19 + 12 = 31 \text{ sweets} \end{array}$$

$$\begin{array}{r} \underline{\text{sweets that}} \\ \underline{\text{remained}} \\ 37 - 31 \\ = 6 \text{ sweets} \end{array}$$

30. At Akisha Old Kampala Supermarket;

- ✓ A kilogram of rice costs Sh.4,500
- ✓ A kilogram of maize flour costs Sh.3,200
- ✓ A litre of cooking oil costs Sh.600.

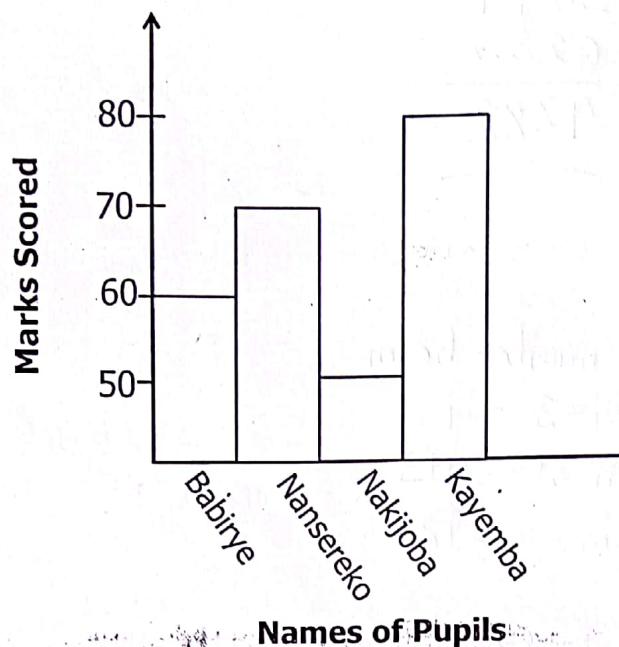
a) Calculate the total amount of money that can be used to buy 2 Kilograms of rice and 2 litres of cooking oil. (03 Marks)

Rice	Cooking oil.	Total amount.
sh. 4500 × 2	sh. 600 × 2	sh. (9000 + 1200)
sh. 9000	sh. 1200	sh. 10,200

b) If Amad has Sh.20,000 and buys all the items indicated above, Calculate his change. (02 Marks)

Total.	Change
sh. (4500 + 3200 + 600)	sh. (20,000 - 8300)
sh. 8300	sh. 11,700

31. The graph below shows the marks obtained by pupils in a weekend test.



- a) Who was the best performer according to the graph? (01 Mark)

Kayemba

- b) How many more marks did Nansereko obtain than Nakijoba?  
More marks (02 Marks)

$$70 - 50$$

$$= 20 \text{ more marks}$$

- c) How many pupils scored below 72 marks? (01 Mark)

3 pupils

- d) Find the total mark scored by all the pupils in the class:

$$(60 + 70) + (50 + 80)$$

$$130 + 130$$

$$= 260$$

32. a) Add 3049 to 6233.

(02 Marks)

$$\begin{array}{r} 3049 \\ + 6233 \\ \hline 9282 \end{array}$$

b) I think of a number, when I subtract 3 from it, the answer I get is 9. What is the number? (02 Marks)

Let the number be  $m$

$$m - 3 = 9$$

$$m - 3 + 3 = 9 + 3$$

$$m = 12$$

c) Workout 325 using long division.

(02 Marks)

$$\begin{array}{r} 065 \\ \hline 5 \overline{)3^{\prime}25} \\ 0x5 \quad \overline{0} \\ \quad \quad \downarrow \\ \quad 3 \quad 2 \\ \hline \quad 6 \quad 5 \\ 6x5 = \overline{3 \quad 0} \\ \quad \quad \downarrow \\ \quad 2 \quad 5 \\ 5x5 \quad \overline{2 \quad 5} \\ \quad \quad \quad \quad \downarrow \\ \quad \quad \quad \quad 0 \quad 0 \end{array}$$