



SUREKEY EXAMINATIONS BOARD

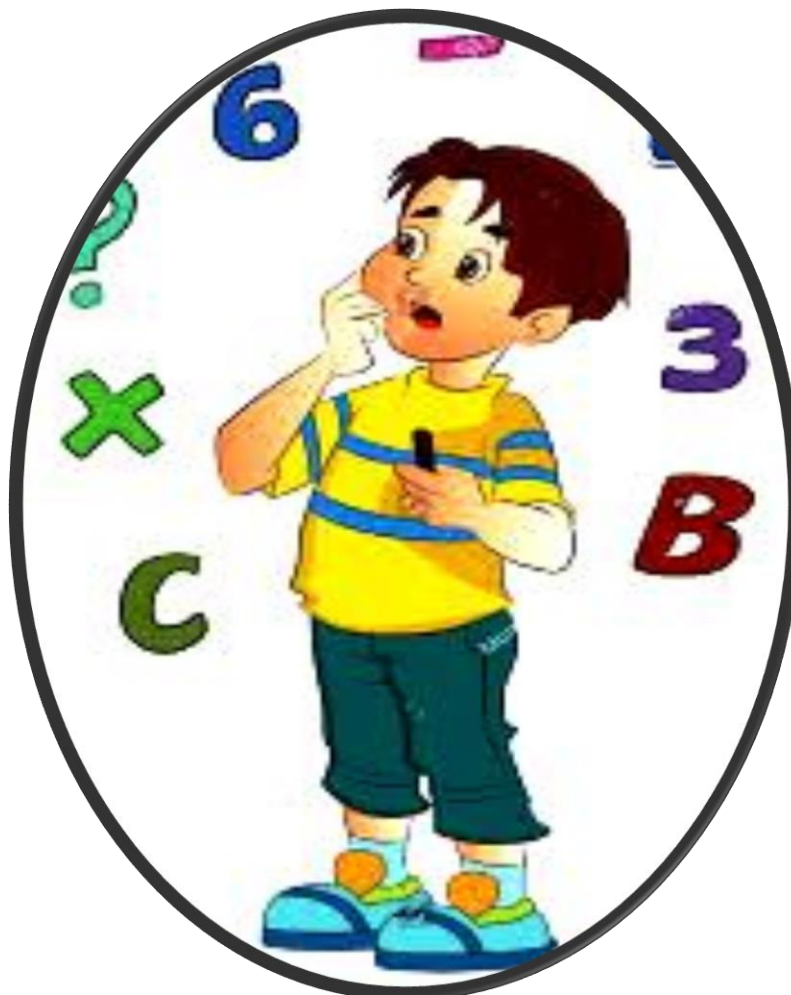
PRIMARY FOUR PLACEMENT SET

2023

MATHEMATICS

PREPARED BY:

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“Don’t speak for Quality, Let the Quality Speak for itself”

SECTION A: 40 MARKS

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

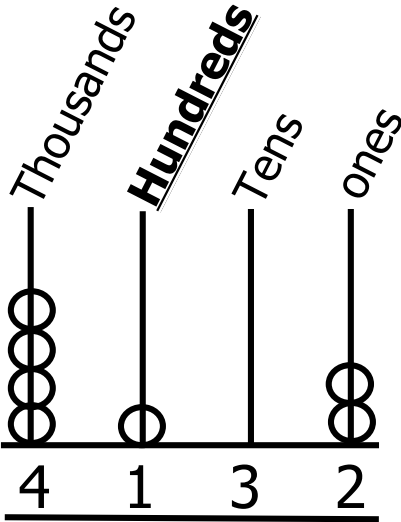
1. Workout: 4×3
 $= 12$

2. Write 1,001 in words.

Thousands	Units		
1	0	0	1

$=$ One thousand, one

3. Complete the abacus below.



4. Fill in the missing starting numbers in the sequence:

15 , 20 , 25, 30, 35, 40, 45.

5. Workout: $\frac{4}{8} - \frac{3}{8}$

LCD = 8

 $= \frac{4-3}{8}$

 $= \frac{1}{8}$

6. Subtract 4 from the number that comes after 8.

9 comes after 8
 $= 9 - 4$
 $= 5$







7. What number has been expanded below?

$$\begin{array}{r} 8000 + 900 + 60 + 4 \\ = \quad 8000 \\ \quad 900 \\ \quad \quad 60 \\ \quad + \quad 4 \\ \hline 8964 \end{array}$$

8. Mukisa sold 58 watermelons on Saturday and One hundred four watermelons on Sunday. How many watermelons did he sell in the two days altogether?

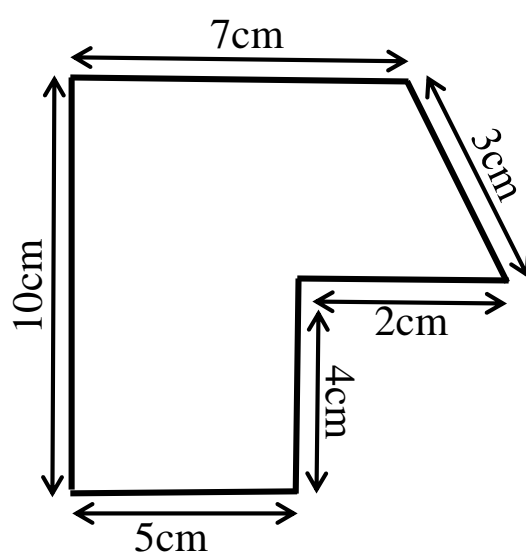
Saturday	=	$\overset{1}{5}8$	$8 + 4 = 12$
Sunday	=	$+ \underset{4}{10}4$	$5 + 1 = 6$
		<u>162</u>	

∴ He sold 162 watermelons in the two days altogether.

9. Given that  represents 15 boys in a class and  represents 20 girls the class. Find the total number of pupils represented by    .

<u>Total number of boys</u>	<u>Total number of girls</u>	<u>Number of pupils</u>
1 picture represents 15 boys	1 picture represents 20 girls	= 30 + 40
2 pictures represent 15 x 2	2 pictures represent 20 x 2	= 70pupils
<u>= 30boys</u>	<u>= 40girls</u>	

10. Calculate the Perimeter of the figure below.

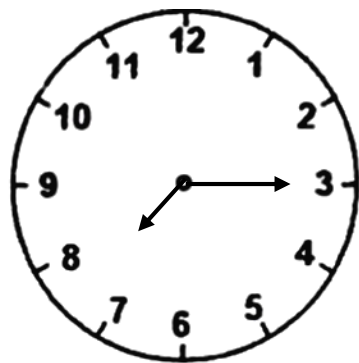


$$\begin{aligned} \text{Perimeter} &= \text{Sum of all sides} \\ &= 7 + 3 + 2 + 4 + 5 + 10 \\ &= \underline{31\text{cm}} \end{aligned}$$

11. Write 28 in Roman Numerals.

$$\begin{aligned} 28 &= 20 + 8 \\ &= XX \quad VIII \\ &= \underline{XXVIII} \end{aligned}$$

12. Show the time 'a quarter past seven o'clock' on the clock face below.



13. Simplify: 9balls + 7stones + 3balls + 2stones.

$$= (9\text{balls} + 3\text{balls}) + (7\text{stones} + 2\text{ stones})$$
$$= 12\text{balls} + 9\text{stones}$$

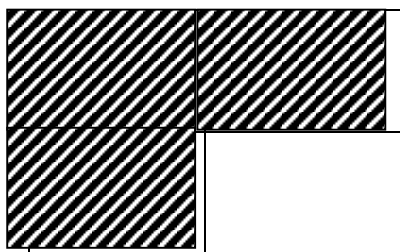
14. Aminah went to the shop and bought a book at Shs.1,500. The shopkeeper gave her a 500 shillings coin as her change. How much money did Aminah have before buying the book?

$$\begin{array}{r} = \text{Sh. } 1,500 \\ + \text{Sh. } 500 \\ \hline \text{Sh. } 2,000 \end{array}$$

15. How many days are in 3 weeks?

$$\begin{array}{rcl} 1 \text{ week} & = & 7\text{days} \\ 3 \text{ weeks} & = & 7 \times 3 \\ & = & \underline{21\text{days}} \end{array}$$

16. Shade $\frac{3}{4}$ of the figure.



17. Sarah has a kettle containing 10 litres of milk and gives each of her children one $\frac{1}{2}$ litre cup full of milk shown in the diagrams below. Find how many children Sarah has.



$$\begin{array}{rcl} & = & 10 \div \frac{1}{2} \\ & = & 10 \times \frac{2}{1} \\ & = & 10 \times 2 \\ & = & \underline{20\text{children}} \end{array}$$

18. Given that $m = 8$ and $n = 3$. Find the value of $m + n$.

$$\begin{aligned} &= 8 + 3 \\ &= 11 \end{aligned}$$

19. Given that Set $X = \{a, b, c, d, e, i\}$, Set $Y = \{\text{all vowel letters}\}$.
List all members of set $X \cap Y$.

$$\begin{aligned} X &= \{a, b, c, d, e, i\} \\ Y &= \{a, e, i, o, u\} \\ X \cap Y &= \{a, e, i\} \end{aligned}$$

20. Our school is 120 meters away from the borehole. What is the distance in centimeters (cm) given that $1m = 100cm$?

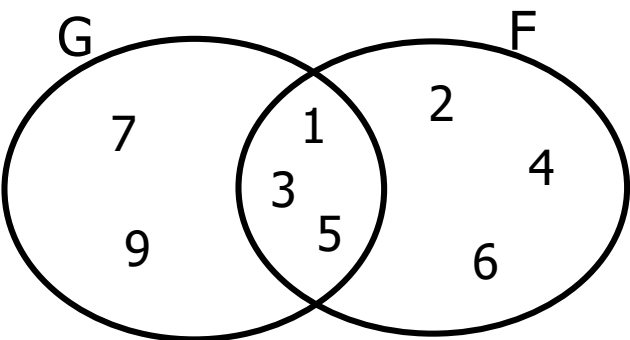
$$\begin{aligned} 1m &= 100cm \\ 120m &= 100 \times 120 \\ &= 12000cm \end{aligned}$$

SECTION B: 60 MARKS

Answer **all** questions in this section
Marks for each question are indicated in brackets.

21. Given that,
Set $G = \{1, 3, 5, 7, 9\}$
Set $F = \{1, 2, 3, 4, 5, 6\}$

(a) Show the above information on the Venn diagram below. (03 Marks)



(b) How many members has Set G? (01 Mark)

$$\begin{aligned} G &= \{1, 3, 5, 7, 9\} \\ n(G) &= 5 \end{aligned}$$

(c) Find $n(G \cup F)$ (02 Marks)

$$\begin{aligned} G \cup F &= \{1, 3, 5, 7, 9, 2, 4, 6\} \\ n(G \cup F) &= 8 \end{aligned}$$

22. Henry went to the Supermarket and bought the following items while going back to school.

- 2 pens at Shs.500 for each pen
- 1 dozen of books at Shs.12,000
- A Geometry Set at Shs.2,000

(a) How much did he pay for the pens? (01 Mark)

$$\begin{aligned} &1 \text{ pen costs sh.500} \\ &2 \text{ pens cost sh.500} \times 2 \\ &\qquad = \text{sh.1000} \\ &\therefore \text{He paid sh.1000 for the pens} \end{aligned}$$

(b) Find the total amount of money he paid for all the items he bought. (03 Marks)

$$\begin{array}{r} = \text{Sh. } 12000 \\ \text{Sh. } 2000 \\ + \text{Sh. } 1000 \\ \hline \text{Sh. } 15000 \end{array}$$

23. Given the number **4658**, use it to answer the questions below.

(a) Write the above number in expanded form using values. (01 Mark)

TH	H	T	O
4	6	5	8

$$\begin{aligned} &= (4 \times 1000) + (6 \times 100) + (5 \times 10) + (8 \times 1) \\ &= 4000 + 600 + 50 + 8 \end{aligned}$$

(b) What is the place value of 5 in the above number? (01 Mark)

TH	H	T	O
4	6	5	8

∴The place value of 5 is tens

(c) Find the sum of the value of **4** and **6** in the above number. (03 Marks)

<table border="1" style="width: 100%;"> <tr> <td>TH</td> <td>H</td> <td>T</td> <td>O</td> </tr> <tr> <td>4</td> <td>6</td> <td>5</td> <td>8</td> </tr> </table>	TH	H	T	O	4	6	5	8	<u>Value of 4</u> = 4 x 1000 = 4000	<u>Value of 6</u> = 6 x 100 = 600	<u>Sum of values</u> = 4000 + 600 = 4600
TH	H	T	O								
4	6	5	8								

24. (a) Akello started driving his car to work at 8 o'clock in the morning and reached his workplace at a half past 10 o'clock. How long did Akello take while driving? (02 Marks)

$$\begin{aligned} \text{Duration} &= \text{Ending time} - \text{Starting time} \\ &= 10 : 30 \\ &\quad - 8 : 00 \\ &\quad \hline &\quad 2 : 30 \end{aligned}$$

∴ Akello took 2hours and 30 minutes while driving

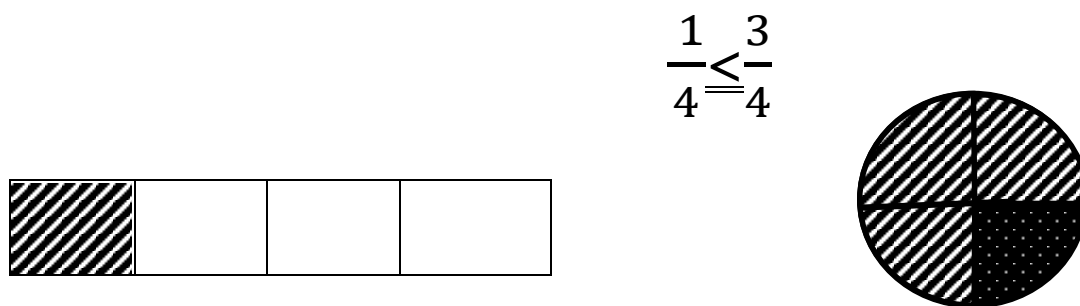
(b) Work out: (02 Marks)

HRS	MIN	
3	45	= 45 + 30
+ 2	30	= 75
6	15	<i>1 hour = 60 minutes</i>
		$75 \div 60 = 1 \text{ rem } 15$

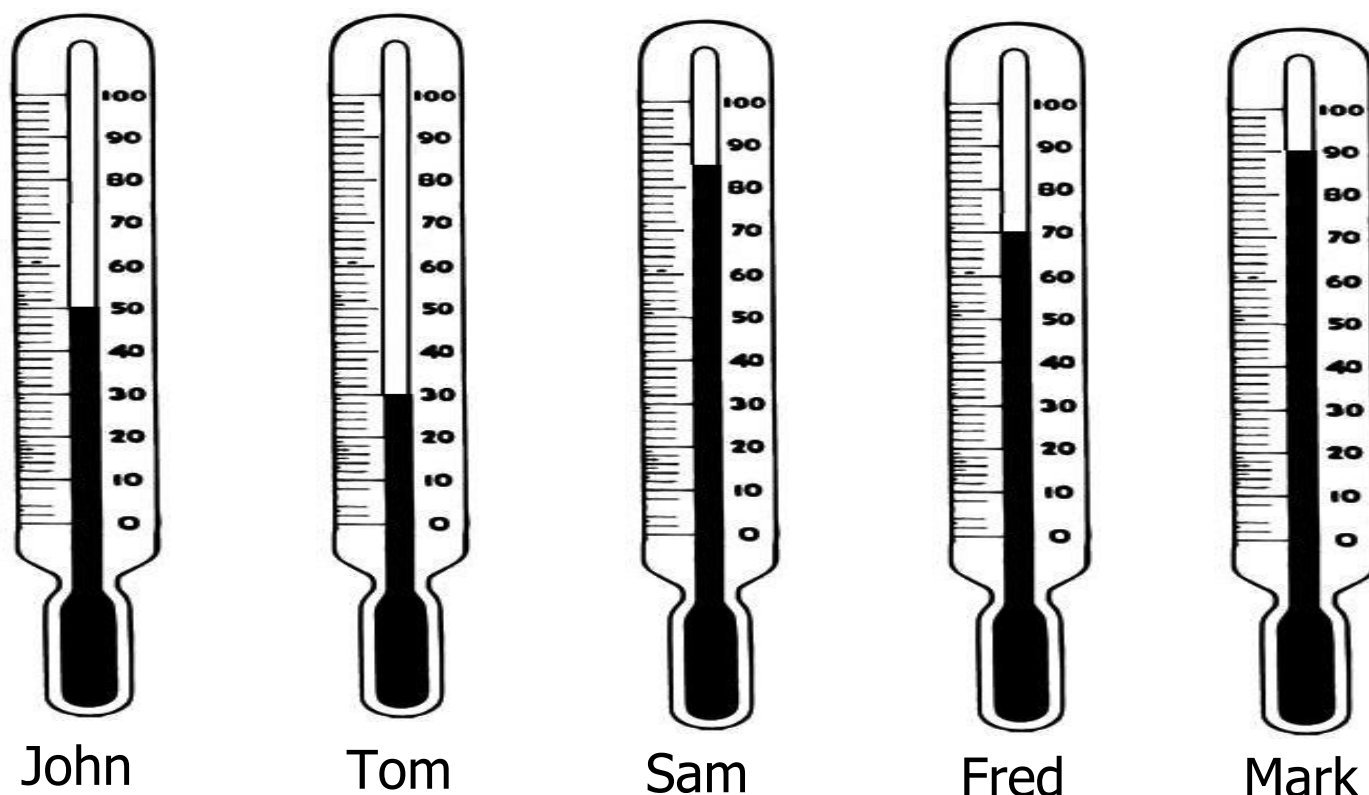
25. (a) Shalon had $\frac{7}{9}$ of a sugarcane and gave $\frac{3}{9}$ of it to Grace. What fraction did she remain with? (02 Marks)

$$\begin{aligned}
 &= \frac{7}{9} - \frac{3}{9} \\
 &= \frac{7-3}{9} \\
 &= \frac{4}{9}
 \end{aligned}$$

- (b) Use $<$, $>$ or $=$ to complete the statement. The diagrams below may help you in your working. (02 Marks)



26. The diagrams below show temperatures of five boys that were taken during the COVID 19 Reporting to school week. Study them carefully and use them to answer questions that follow.



- (a) Who had the highest temperature according to the diagrams? (01 Mark)
- Mark had the highest temperature according to the diagrams

(b) Workout the difference between Sam and Fred’s temperature.
 (02 Marks)

Sam

=

85

Fred

=

- 70

15

(c) Workoutthetotal temperature of the five boys.(02 Marks)

=

50

30

85

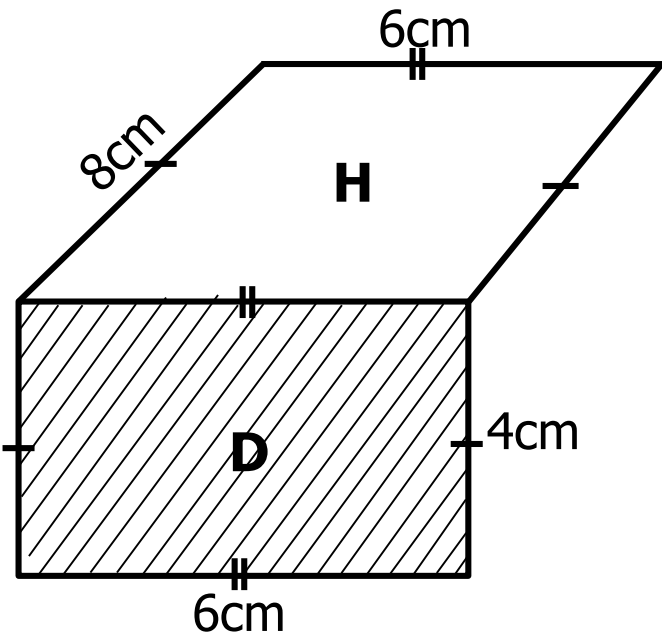
70

+ 90

325

(d) What was the temperature recorded for Tom? (01 Mark)
 30 was recorded for Tom

27. Below are two figures **D** and **H**. Study them carefully and answer the questions that follow.



(a) Work out the area of the shaded figure marked **D**. (02 Marks)

Area

=

L x W

=

6cm x 4cm

=

24cm²

(b) Calculate the total distance around the two figures **H** and **D**. (03 Marks)

Total distance

=

sum of all sides

=

6cm + 4cm + 8cm + 6cm + 8cm + 4cm

=

10cm + 14cm + 12cm

=

36cm

28. Below is a magic square. Use it to answer the questions that follow.

<i>m</i>	2	7
4	6	8
5	<i>k</i>	<i>t</i>

(a) Work out the magic sum (02 Marks)

$$\begin{aligned} &= 4 + 6 + 8 \\ &= 10 + 8 \\ &= \underline{18} \end{aligned}$$

Or

$$\begin{aligned} &= 5 + 6 + 7 \\ &= 11 + 7 \\ &= \underline{18} \end{aligned}$$

(b) Find the value of *m*, *k* and *t* (03 Marks)

mkt


$$\begin{aligned} m + 2 + 7 &= 18 \\ m + 9 &= 18 \\ m &= 18 - 9 \\ m &= \underline{9} \end{aligned}$$

$$\begin{aligned} k + 2 + 6 &= 18 \\ k + 8 &= 18 \\ k &= 18 - 8 \\ k &= \underline{10} \end{aligned}$$

$$\begin{aligned} t + 7 + 8 &= 18 \\ t + 15 &= 18 \\ t &= 18 - 15 \\ t &= \underline{3} \end{aligned}$$

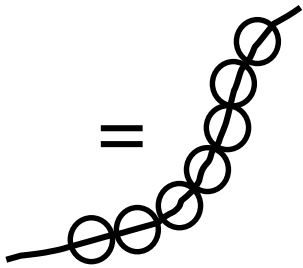
29. (a) Draw bundles to represent 32 pens. (02 Marks)

$$\begin{array}{r} 6 \text{ rem } 2 \\ = \underline{32} \\ - 5_1 \\ \hline \end{array}$$

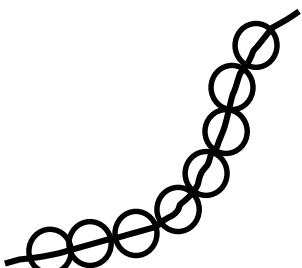


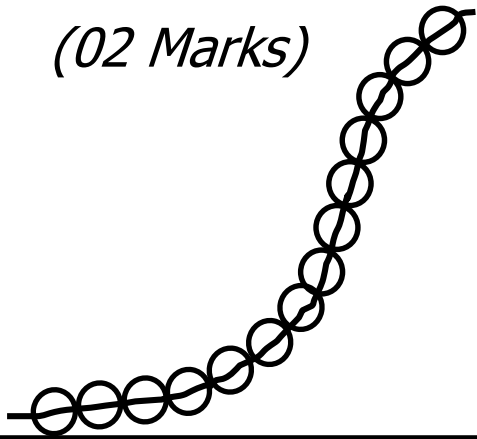
(b) Complete the following. (02 Marks)

+



=





(c) Subtract: 936 – 457 (02 Marks)

$$\begin{array}{r} 8 \ 1_2 \ 1 \\ = \underline{936} \\ - \underline{457} \\ \hline 479 \end{array}$$

30. A store received 100 boxes where each box had 6 plates.

(a) How many plates did the store receive? (02 Marks)

1 box has 6 plates

100 boxes have 100 x 6

= 600 plates

The store received 600 plates

(b) After selling 80 boxes, how many plates were sold? (02 Marks)

1 box has 6 plates
 80 boxes have 80×6
 $= 480$ plates

480 plates were sold

(c) How many plates remained after selling the 80 boxes? (01 Mark)

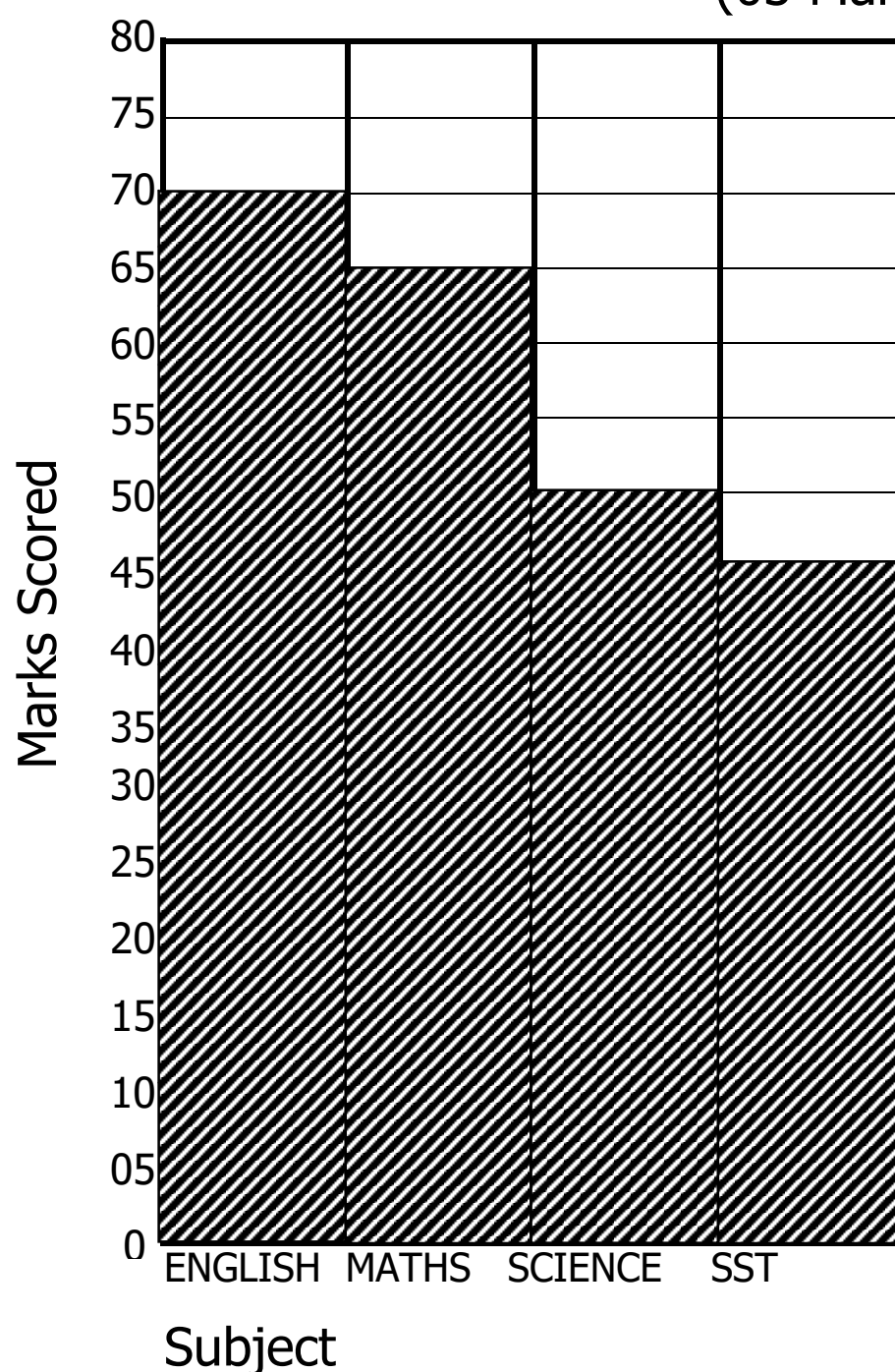
$$\begin{array}{r} 600 \\ - 480 \\ \hline 120 \end{array}$$

120 plates remained after selling the 80 boxes

31. The table below shows how Akiiki scored in his End of Year Examinations.

Subject	ENGLISH	MATHS	SCIENCE	SST
Marks Scored	70	65	50	45

(a) Represent the information in the above table on the bar graph below. (03 Marks)



(b) In which subject did Akiiki score the lowest marks? (01 Mark)

Akiiki scored the lowest mark in Social studies

- (c) If the pass mark was 60%, how many subjects would Akiiki pass? (01 Mark)

Akiiki would pass two subjects if the pass mark was 60%

32. Bruno is 8 years old. Ntambi is two years older than Bruno.

- (a) How old is Ntambi? (02 Marks)

$$= 8 + 2$$

$$= 10\text{years}$$

\therefore Ntambi is 10 years old

- (b) Find the total age of Bruno and Ntambi. (02 Marks)

$$= 8 + 10$$

$$= 18\text{years}$$

- (c) How old will Bruno be after 3 years? (01 Mark)

$$= 8 + 3$$

$$= 11\text{years}$$

\therefore Bruno will be 11 years after 3 years
