

GREATER BUIKWE DISTRICT EXAMINATION  
COMMITTEE

**MOCK ASSESSMENT 2023**  
Primary Seven MATHEMATICS

Time Allowed: 2 hours 30 Minutes

RANDOM NO.					PERSON NO.	

Candidate's Name: .....

Candidate's Signature: .....

DISTRICT ID NO: 

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 .....

Do not open this booklet until you are told to do so.

Read the following instruction carefully:

1. The paper has two Sections: A and B
2. Section A has 20 short questions (40 marks)
3. Section B has 12 questions (60 marks)
4. Answer **All** questions. All answers to both Sections A and B must be written in spaces provided.
5. All answers must be clearly written using blue ball point Pen or ink. Only diagrams should be drawn in pencils.
6. Unnecessary changes of work may lead to loss of marks.
7. Do not fill in the boxes indicated "For examiner's use only".

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

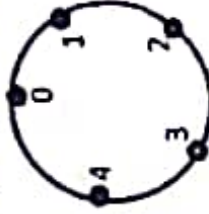
Turn Over

## SECTION A

1. Workout:  $53 + 36$

2. Write 90,019 in words.

3. Workout:  $3 - 4$  (Write 5) using a dial below

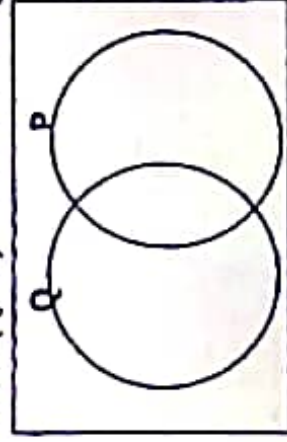


4. Circle all the composite numbers in the list below:

3, 5, 7, 9, 11, 15.

5. Solve the equation;  $2 - 7n = 23$

6. Shade  $(Q - P)^c$  on the Venn diagram below



7. Expand 506.4 using powers of ten.

8. The price of sugar was increased by shs.1400 to shs. 5400. Find the percentage increase.

Convert 0.25 m<sup>3</sup> to cubic centimetres.

10. A meeting that lasted  $1\frac{1}{4}$  hrs ended at the morning time shown on the clock face below. At what time did the meeting start?

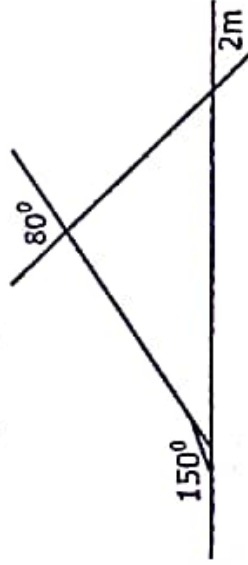


11. A cup was  $\frac{2}{3}$  full of milk and  $\frac{3}{5}$  of the milk poured. Find the fraction of the milk that remained in the cup.

12. Write the place value of 4 in the number 143 762

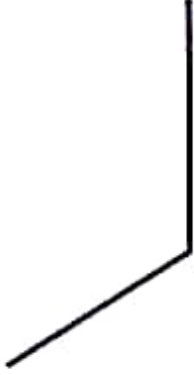
13. A dice is tossed once. What is the probability of a triangular number appearing on top?

14. Study the figure below and use it to find the value of  $m$  in degrees.



15. What must be subtracted from  $5y - 3$  to get  $2y + 2$ ?

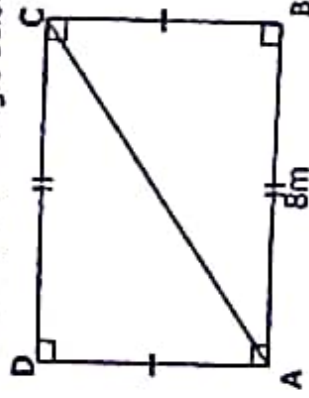
16. Bisect the obtuse angle below:



17. If  $\frac{3}{4}$  kg of sugar cost shs.3900, find the cost of  $1\frac{1}{2}$  kg of sugar.

18. A compound can be cleaned by 3 boys in 20 minutes. How many boys working at the same rate can clean the same compound in 12 minutes?

19. The area of the rectangle below is  $48\text{m}^2$ . Study it carefully and answer the question



Find the length of diagonal AC

20. Find the highest number of girls that can share 18 or 24 mangoes without leaving any remainder.

### SECTION B

21. a) Workout: 
$$\begin{array}{r} 432_{five} \\ - 134_{five} \\ \hline \end{array}$$

(2marks)

- b) If  $3m_{five} = 103_{four}$ , find the value of m.

(3marks)

22. The rates at which different currencies are bought and sold in a commercial bank are shown below. Study the table carefully.

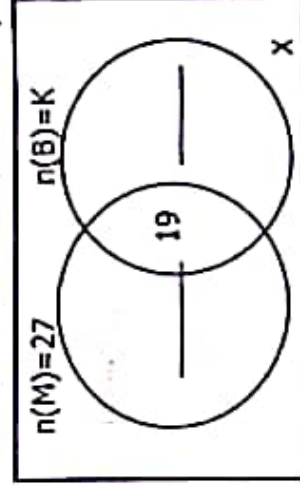
Currency	Buying	Selling
US dollar (\$)	Ug sh. 3600	Ug sh. 3620
Pound sterling (£)	Ug sh. 4800	Ug sh. 4850
Kenya shilling (K sh)	Ug sh 25	Ug sh. 26

- a) John has Ug. Sh. 742,100. How many US dollars will John get from the bank? (2 marks)

- b) A trader came with Ksh.97000 and exchanged it for pound sterling (£). How many pounds did the tourist get from the bank? (3 marks)

23. In a village of 55 farmers, 27 grow maize (M), 19 grow both maize and beans, K grow beans (B) while 43 farmers grow maize and beans altogether.

- a) Use the above information to complete the Venn diagram below: (2 marks)



- b) Find the value of K

(2 marks)

- c) Find the probability of picking a farmer who grows neither maize nor beans. (2marks)



he rested for 30 minutes and continued to town C a distance of 120 km at a speed of 40 km/hr.

- a) At what time did the motorist reach town C?

(3 marks)

- b) Work out the motorist's average speed for the whole journey.

(3 marks)

25. Give that  $m=4$ ,  $n= m+2$  and  $p=n-m$ . Find the value of  $\frac{p^2(n-m^2)}{5}$

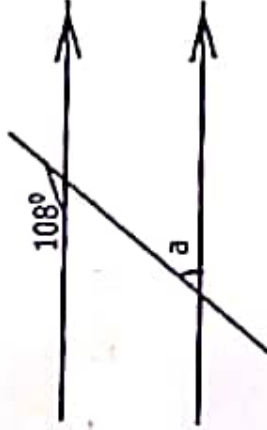
(4 marks)

- b) Give the solution set for  $-3 < P \leq 2$

(1 mark)

26. a) The exterior angle of a regular octagon is  $(3m - 15^\circ)$ . Find the value of  $m$  in degrees. (3 marks)

- b) Find the value of  $a$  in degrees in the figure below. (2 marks)



27. In a school there are 150 pupils in P.7 and 105 pupils in P.6. If each pupil is served 2 eggs daily. How many eggs are served each day? (2 marks)

- b) If each tray of eggs costs sh.10, 500, how much money does the school spend on eggs each day? (2 marks)



29. The average of

$$x + 2, 5, 7 \text{ and } 3 \text{ is } x - 1$$

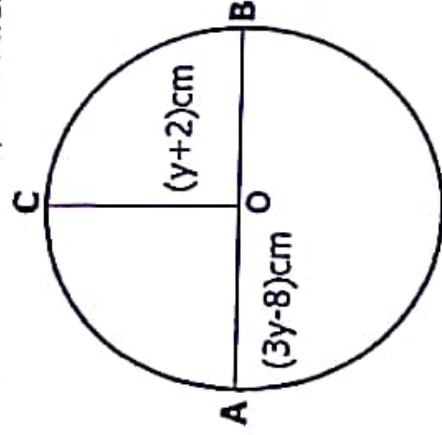
a) Find the value of  $x$

(2 marks)

b) Work out the median of the numbers

(1 mark)

30. The figure below is a circle,  $O$  is the center of the circle. Line  $AB = (3y - 8)$  cm and  $OC = (y + 2)$  cm. study it carefully and answer the questions that follow.



Work out the area of the circle (take  $\pi = \frac{22}{7}$ ) (5 marks)

31. In a quiz of 20 questions 3 marks are awarded for every correct answer and a mark is deducted for every wrong answer.

a) How many marks will a candidate who fails 6 questions get? (2 marks)

b) If Samuel got 32marks, how many questions did Samuel pass?

(3marks)

32. A ship leaves port H and sails for 200km to port G on a bearing of  $065^\circ$ . It then sails for 120km to port J on a bearing  $315^\circ$ .

a) Draw a sketch to show the journey of the ship (1mark)

b) Using a scale of 1cm to represent 20km, draw an accurate diagram to show the journey of the ship. (4 marks)

c) Find the shortest distance from port H to port J in kilometers (km) (1 mark)

\*\*\*END\*\*\*