SMART STAR EXAMINATIONS BOARD

P.7 QUALITY CHECK SET ONE

2024

MATHEMATICS

Time allowed : 2 hours 30 minutes

Name of Candidate ……………………………………………………………………………………………

Name of School……………………………………………………………………………………………….

Name of District…………………………………………………………………………………………….

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. All the working 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 fountain pen. Any work done in pencil other than graphs, pictures and diagrams will **not** be marked.

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

5. Unnecessary changes of work may lead to **loss** of marks.

6. Any handwriting that cannot easily be read may lead to **loss of marks.**

7. Do **not** fill anything in the boxes indicated: **"For Examiners' Use Only"** and boxes inside the question paper.

FOR EXAMINERS' 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		

Turn Over

1. Work out : 282 – 19

2. Given that Set X = {counting numbers not greater than 5}. Find X∩W if set W = {the first five even numbers}.

3. What must be added to -2 to get -1 ?

4. Solve 5 – 2p = 27

5. Walusimbi was invited at a party at a quarter past mid day. If he was late by nineteen minutes, at what time did he arrive at the party?

6. Find the value of p in the next number in the sequence.
   1, 3, 6, 11, 18, 2p − 1

7. Kanyankole was standing in a line such that he was the ninth from the kitchen door way and the seventh from the last person on the line. How many boys were on the line?

8. With the aid of a pair of compasses and a ruler only, construct an angle of 30^0 in the space given below.

Turn Over

9. Marks were written in a records book such that 80% appeared four times, 905 appeared two times, 75% appeared once and 87% appeared seven times. Find the model mark.

10. Express $11\frac{2}{3}$ % as a simplified fraction.

11. Given that 2y, y, and 60^0 are co-interior angles. Find the value of 8y.

12. What number in finite seven is equivalent to 46 ?

13. Increase shs.420,000 in the ratio of 9:6

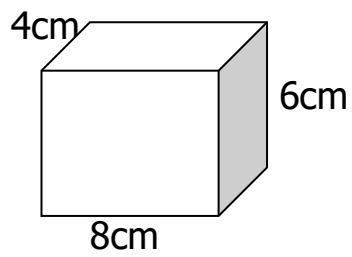14.   Write XCIX in words.

15. Convert 4005 dm to Metres.

16. Simplify 12m – 2p – 4m – 9p.

17. Express 58 as a quinary base.

18. find the probability that arsenal FC can win a football match when it plays a champions league final with Manchester United FC .

19. Lethal folded a wire and used to make the figure below, find the length of the wire used.

4cm

6cm

8cm

20. Given that $PF_{60} = \{ 3_1, n, 2_1 \}$. Find the value of n.

*Answer **all** the questions in this Section.*

*Marks for each question are indicated in brackets.*

21. (a) Express 0.0097205 in scientific notation (*02 marks*)

(b) Find the sum of the value of 7 and the position of 6 in the numeral 472.056.

(3 marks)

22. In a certain village of 1200 members, 600 people support Bobi Wine (B), 700 people support Museveni (M) and x people support both Bobi Wine and Museveni while 50 0f them support other presidential aspirants.

(a) Complete the Venn diagram below. (*3 marks*)

n(Ɛ) = 1200

n(M)=   n(B)=

600-x
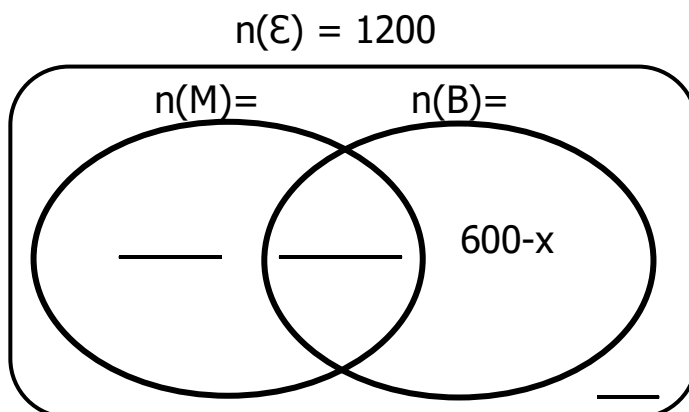
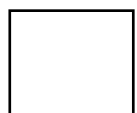(b). Find the number of the members who support both candidates. *(2marks)*
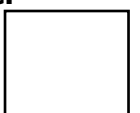
23.(a) If the difference between m and 1 is tripled, the result is 18. Find the value of m. (*3 marks*)

(b). Nabunya is two thirds as old as Nabukalu. If Nabunya is 4n years old, Find the sum of their ages. (*2 marks*)

24. (a) simplify: $\dfrac{0.24 \times 0.3}{0.8 \times 1.0}$ *(3marks)*

(b). work out : $4.3 - 5.6 + 2.1$ *(2marks)*

25.(a) Among had three cards labeled with integers consecutively as p, p+1, p+2. If their range was 2p, find the labels on Among's cards.   *(3marks)*

(b). find the product of the 2nd and 4th prime numbers between ten and twenty-two.   *(2marks)*

26. Complete the table below in roman numerals.   *(4 marks)*

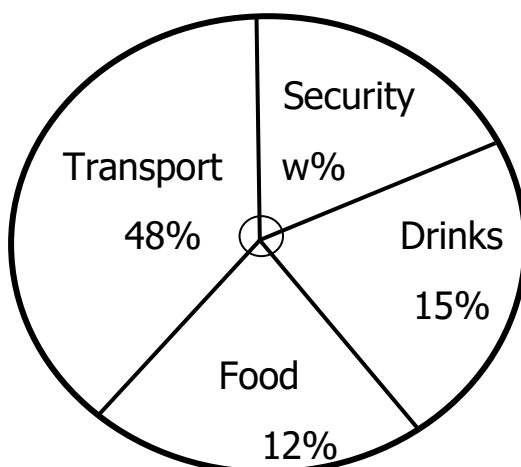| +	IX	V	X
II	____	VII	XII
IV	XII	____	XIV
XII	____	XVII	____

Turn Over

27. With the help of a ruler, a pencil and a pair of compasses only, construct a regular polygon MAN such that AN = 6.0cm, angle NAM = 60^0 and

angle MNA = 45^0.   *(4marks)*

(b) Measure length AM   (1mark)

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28. The circle graph below shows how the Prime Minister spends her weekly allowances.

    (a)   Find the value of w.   *(2marks)*

(b) If she spends shs.980,000 on transport, find the amount she gets as
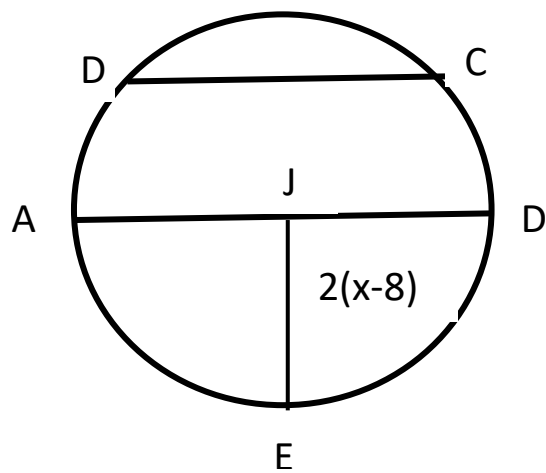   allowances.   *(2marks)*

29. A lorry driver left Jinja and drove to Tororo covering a distance of 60km at
a speed of 40km/h. He then continued to Mbale at a speed of 30km/h for 6
hours.

(a) How long did it take him to drive from Jinja to Tororo ?   *(2marks)*

(c) Find the driver`s average speed for the entre journey.   *(3marks)*

30. study the figure below and use it to answer questions below it

(a). Name the line;   (1mark @)

(i) AD…………………………………………………………..

(ii) JE…………………………………………………………..

(iii) BC…………………………………………………………..

(b). Given the length of line AD = 28cm, Find the value of x. *(2marks)*

31. The bill table shows the items Musamalia bought from the nearby shop.

ITEM	QUANTITY	UNIT COST	TOTAL
Books	4 dozens	Shs.9000	Shs._____
Sugar	_____kg	Shs.4000	Shs.10,000
Salt	500gm	Shs._____@kg	Shs.2500
Apples	18 apples	Shs. 2000 per 3 apples	Shs._____
	Total Expenditure		Shs._____

(a)   Complete the table above   (5 marks)

(b)   If she went back home with shs.12500, how much did she have at first?
($ 1 $ mark)

32. The lines drawn below meet at a certain point and angles are formed as shown below. Use the figure formed to answer questions below.
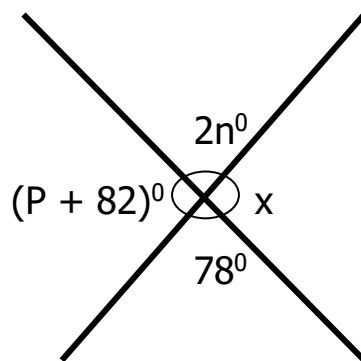
Find the value of;   (2marks @)

(a)   n

(b)   p

(c)   x

SUCCESS