KOLFRAM EDUCATIONAL SERVICES KAMPALA

THE KOLFRAM EXAMINATIONS BOARD

MID TERM ONE EXAMINATION

SET III MARCH EXAMINATION 2023

PRIMARY SEVEN

MATHEMATICS

Time allowed: 2 hours 30 minutes

Index Number

Random number						Personal No.		

Candidate's Name: .....

Candidate's Signature: .....

School Random No......

District ID: .....

Read and follow these instructions carefully:

1. Do not write your **school** or **district name** anywhere on the paper.
2. This paper has **two** sections: **A** and **B**. Section A has **20** questions (40marks) and Section B has **12** questions (60 marks). The paper has **16** printed pages.
3. Answer **ALL** questions. All answers to both Sections **A** and **B** must be written in the spaces provided.
4. All answers **must** be written using a **blue** or **black** ball point pen or ink. Diagrams should be drawn in pencil.
5. Unnecessary crossing of work and any handwriting that cannot be easily read may lead to loss of marks.
6. Do not fill anything in the boxes indicated; **For Examiner's use only**.

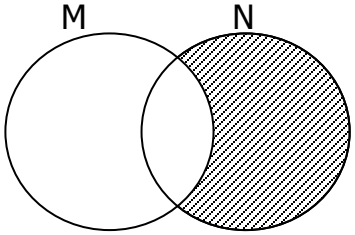
FOR EXAMINERS USE ONLY		
QN. NUMBER	MARKS	EXAMINER'S INITIAL
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25- 26		
27-28		
29-30		
31-32		
TOTAL		

Turn over

SECTION A

1. Add: 72 + 28

2. Describe the shaded region



3. Collect the like term and simplify
4r + 3k – r + 2k.

4. Add: $\frac{1}{2} + \frac{1}{3}$

5. Mark scored the following points in quiz competition 7, 4, 6, 7, 9. Find his range of score.

6. Simplify: $^{+}9 - ^{-}6$

7. Find the supplement of 110^0.

8. Add:
$$\begin{array}{r} 1\,1\,0_{\text{two}} \\ +\,1\,1_{\text{two}} \\ \hline \\ \hline \end{array}$$

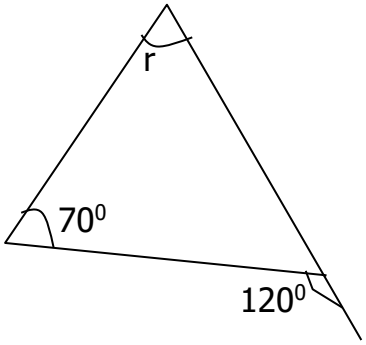
9. An examination started at 9:00a.m. and lasted for 2 ½ Hours. When did it end?

10. Find the next number in the sequence.
36, 25, 16, 9, ___ .

11. Solve: 4k + 2 = 10.

12. Mummy shared 2 dozens of books among her 3 children. How many books did each child get?

13. Find the size of angle r in the figure below.



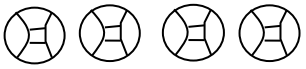
14. Work out: $2 - 5 =$ ____(finite 7)

15. $\frac{2}{3}$ of Barbra's books in her bag are exercise books and the rest are text books. If she has 21 books in her bag, how many text books are in the bag?

16. Apio covered a distance of 2.5km. How many metres did she cover?

17. Which number has been prime factorized below?
$\{2_1, 2_2, 3_1, 3_2\}$

18. Set A = { 1, 2, 3}, how many subsets are in set A?

19. Given that:  represents 8 balls, how many balls are represented by  ?

20. 4 books costs 20,000/=, Find the cost of 7 similar books.

SECTION B

21. Sarah had 24 litres of milk to sell. She sold ¾ of it and the rest went bad.

(a) How many litres did she sell?

(b) Find the number of litres that went bad.

(c) If each litre of milk was sold at 2000/=, how much money did she get from the milk sold? (6 marks)

22. Tim scored the following marks in end of year exams.

MTC	-	95
Scie	-	92
Eng	-	88
SST	-	80
R.E	-	95

(a) Find the

(i) Mode

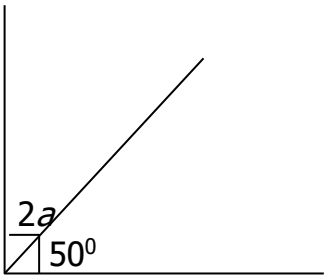
(ii) Range

(iii) Median (1mark each)

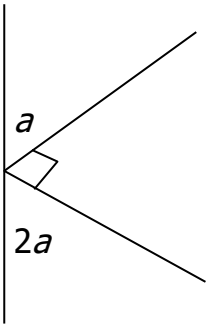
(b) Calculate his average score. (2marks)

23. Find the value of *a* in each of the figures below. (4 marks)

(a)



(b)

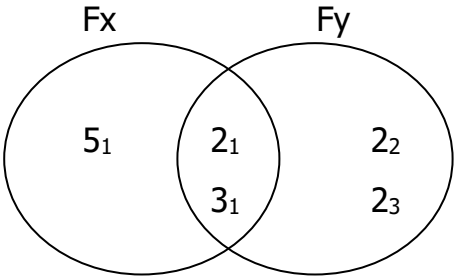


24. Sam went shopping and bought the following items.
2 kg of sugar at 2800/= each kg.
3 bars of soap at 2500/= each bar.
1 ½ litres of cooking oil at 3000/=.
½ kg of salt at 1000/= each kg.

(a) What was his total expenditure?

(b) If he went with 30,000, how much money did he remain with? (6 marks)

25. The diagram below shows prime factors of **two** numbers. Use it to answer questions that follow. (4 marks)



(a) Find the value of;

(i) X

(ii) Y

(b) Calculate the;

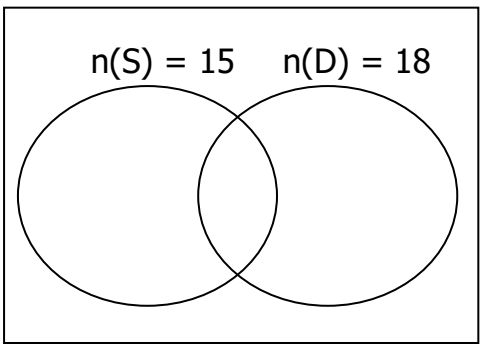
(i) GCF of x and y.

(ii) LCM of x and y.

26 Using a ruler, a pencil and a pair of compasses only, construct a regular hexagon in a circle of radius 4cm. (4 marks)

27. In a class of 30 pupils, 15 like singing, (S) 18 like dancing, (D) and r like both singing and dancing.

(a) Represent the above information on a Venn diagram below.



(5 marks)

(a) Find the number of pupils who like both.

(b) How many pupils like only one activity?

28. Two bells ring in intervals of 30 minutes and 40 minutes. If they ring together at 8:00a.m;
(a) after how many hours will they next ring?

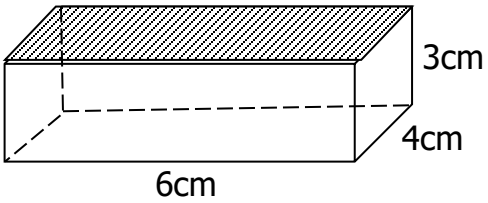
(b) at what time will they ring together again? (5 marks)

29. Given that: $a = 2$, $b = 3$ and $c = 6$. Find the value of;
(a) $a\,b\,c$

(b) $2a + c$

(c) $\frac{bc - a}{4}$ (6 marks)

30. The figure below is a cuboid, use it to answer questions that follow. (6 marks)

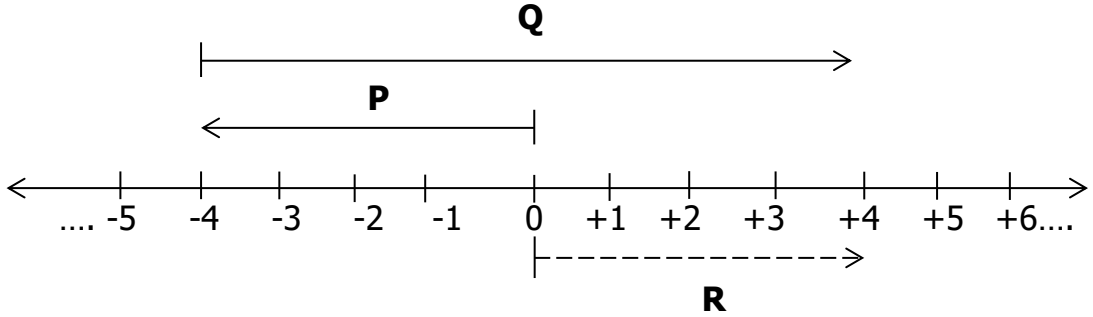


(a) Find the area of the shaded face.

(b) Calculate the volume of the figure.

(c) Workout the total surface area of the figure.

31. Study the number line below and use it to answer questions that follow. (4 marks)



(a) Write down the integers represented by arrow;

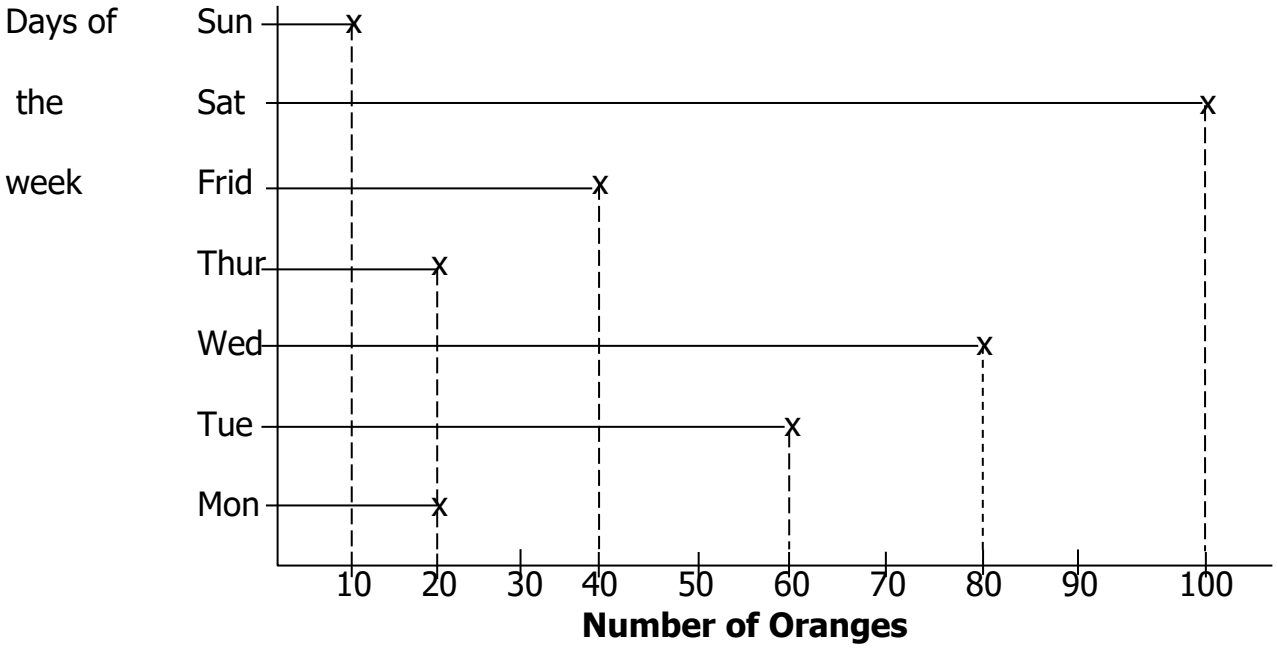
(i) P _____

(ii) Q _____

(iii) R _____

(b) What mathematical statement is represented on the above number line?

32. The graph below shows the number of oranges sold from Mr. Kabanda's farm for a week. Use it to answer questions that follow.



(a) When was the largest number of oranges sold?

_____

(b) On which two days were the sales the same?

(c) How many more oranges were sold on Thursday than on Sunday?

(d) If a heap of eleven oranges cost 1000/=, how much money did Mr. Kabanda get in that week? (5 marks)