KOLFRAM EDUCATIONAL SERVICES KAMPALA

TERM ONE EXAMINATIONS 2023

PRIMARY SEVEN

MATHEMATICS

***Time allowed: 2** hours 15 minutes*

CANDIDATE'S NAME: _____

SCHOOL CODE: _____

SCHOOL RANDOM NUMBER: _____

INDEX NUMBER: _____

Read and follow these instructions carefully:

1. The paper has two section: A and B.
2. Section **A** has 20 short- answer 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 the Spaces provided.
5. All answers must be written using a blue or black ball point pen or ink. Diagrams should be drawn in pencil.
6. Unnecessary change of work may lead to loss of marks.
7. Any handwriting that cannot easily be read may lead to loss of marks.
8. Do not fill any thing in the boxes. They are for examiner's use.

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

SECTION A

1. Divide $27 \div 3$

2. If set A = (vowel letters and set B = { a, b, c, d, e, f}. Find the $n(A \cap B)$

3. If two angles x and $x+40^0$ are complementary angles. Find the value of x.

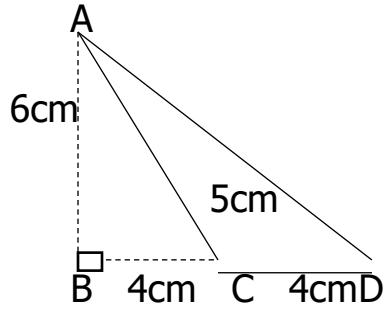
4. Write 44 in Roman numerals.

5. Round off 29.96 to one place of decimal.

6. Construct an angle of 120^0

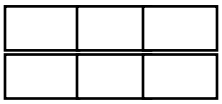
7. Simplify: $4^3 \times 10^0$

8. Find the area of ACD



9. Convert 9000kg to tonnes

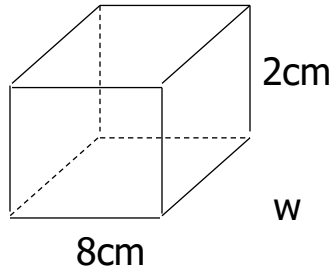
10. Find the area of a circle whose diameter is 14cm

11.	Work out 4 x 6 ÷ 2	12.	Find the square of 16
13.	4 pens cost sh. 2000. What is the cost of 7 pens of the same kind.	14.	What is the place value of 6 in 262.79?
15.	Shade 50% of 	16.	Find the additive inverse of -6
17.	Prime factorise 64 and write your answer in power form.	18.	Write the next number in the sequence 1, 8, 27, 64, _____
19.	Work out: (6 x 5) + (4 x5) using distributive property.	20.	Expand 1101_{two} in value form.

SECTION B

21. The volume of a cuboid below is $80cm^3$. Its length is 8cm and height 2cm.

(a) What is its width? (2 marks)



(b) Work out its total surface area (3 marks)

22. Given the number 46700

(a) Write the number in standard form. (2 marks)

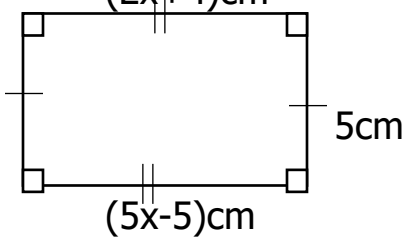
(b) Expand the number above using powers of 10. (2 marks)

23. The sum of three consecutive numbers is 27. If the middle number is K.

(a) Find the value of k. (3 marks)

(b) Find the product of the three numbers. (2 marks)

24. Study the figure below and use it to answer the questions that follow.



(a) Find the value of x. (3marks)

(b) Work out the perimeter of the figure above. (2 marks)

25. Solve:

(a) $3x^2=12$ (2 marks)

(b) Find the value of $4a^2-bc$ if a = 3, b =2 and c= 4 (3 marks)

26. A car takes 3 hrs to cover a certain journey at 60km/hr but is takes only 2hrs to return through the same distance.

(a) Calculate the total distance covered for the whole journey. (3marks)

(b) Work out its average speed for the whole journey. (2 marks)

27. There are 20% more boys that girls in the class. Find the percentage:-

(a) boys (3marks)

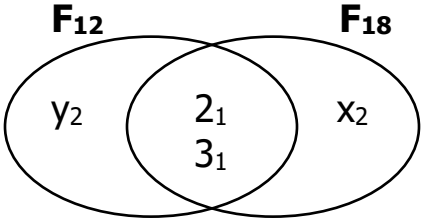
(b) If there were 100 pupils, find the number of girls. (2 marks)

28. Using a ruler, a sharp pencil and a pair of compasses only. Construct triangle ABC in which $< ABC = 60^0$, $< BAC = 45^0$ and AB = 6cm (4 marks)

(b) Measure <C (1 mark)

29. Study the figure below and answer the questions that follow. (2 marks each)

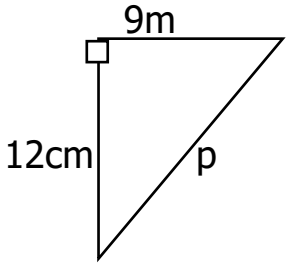
(a) Find the value of:



(a) x (b) y

(b) Work out the lowest common multiple of 12 and 18 (2 marks)

30. Below is a right angled triangle



(a) Find the value of P (3 marks)

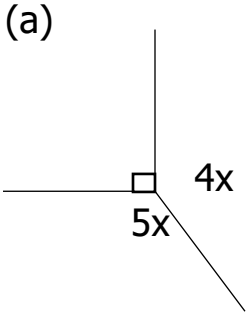
(b) Work out the perimeter of the figure. (2 marks)

31. (a) A certain amount of money was shared by James, Joel and Julius in the ratio 2:3:5 respectively. If Joel got shs. 30,000, find their total share (2 marks)

(a) Express the share got by Julius as percentage. (2 marks)

32. Find the value of x (3 marks each)

(a)



(b)