

Mathematics

PM

01 / 11 / 2016 09: 00-11: 00 AM



Pupil's complete index number

Province District Sector School Pupil
City

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Pupil's names

Surname:

Other names:

**NB : PUPIL'S INDEX NUMBER AND NAMES
MUST BE WRITTEN AS THEY APPEAR
ON THE REGISTRATION FORM.**

PRIMARY LEAVING NATIONAL EXAMINATIONS, 2016

MATHEMATICS

Duration: Two hours

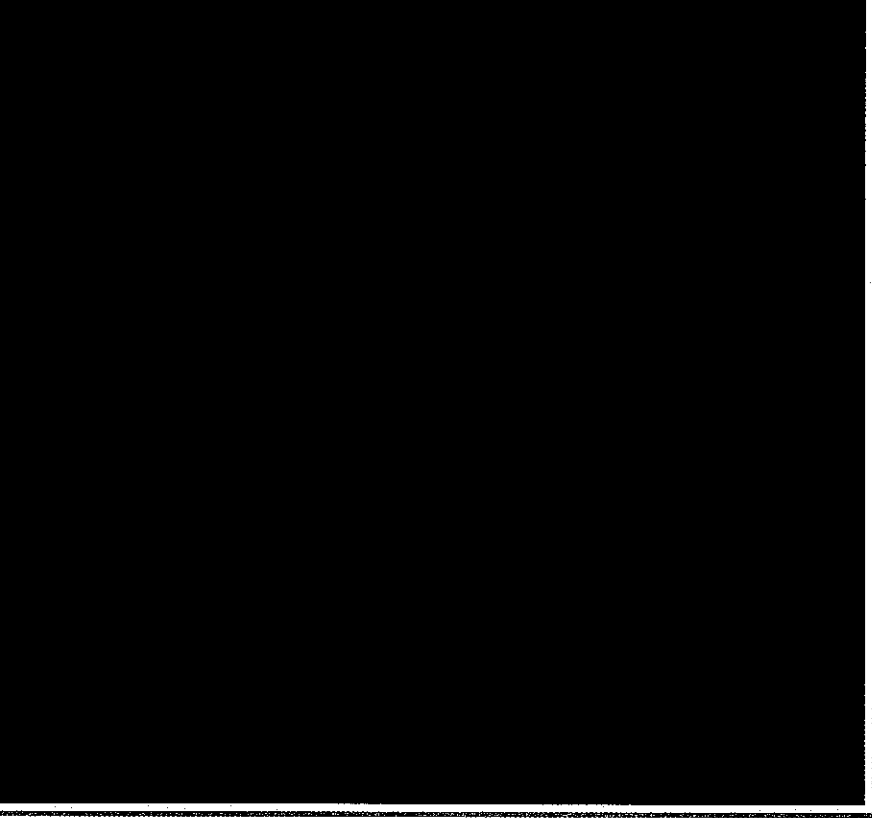
Marks:

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 /100

INSTRUCTIONS

- 1) Do not open this question paper until you are told to do so.
- 2) ***This paper consists of 12 pages and 35 questions. Before starting, check if all pages and all questions are there and are arranged in ascending order.***
- 3) Answer **ALL** questions in this paper.
- 4) Read each question carefully before answering it.
- 5) Answer the questions in the space provided on this question paper.
- 6) Show your working clearly. Marks will be given for showing steps.
All rough work must be done in the space under each question.
- 7) You must use a blue or black pen.
- 8) You are allowed to use a ruler, and a protractor.
- 9) **You are NOT allowed to use a calculator.**



ANSWER ALL QUESTIONS IN THIS PAPER. (100 MARKS)

YOU MAY DO ROUGH WORK IN THE SPACE PROVIDED BELOW EACH QUESTION.	GIVE YOUR ANSWERS IN THE SPACE PROVIDED IN THIS COLUMN. SHOW THE WORKING STEPS.
1) Round off 594,740 to the nearest thousand. (2marks)	
2) Write the following number in words: 540,032 (2marks)	
3) Compare the numbers below, using the sign <, > or = (2marks) $\frac{5}{11}$ <input type="checkbox"/> 0.677	
4) Find the missing number to make the statement correct: (2marks) $39 \times (82 + \square) = 39 \times 100$	
5) Add: $2.4263 + 3.02 =$ (2marks)	
6) Fill in the next two missing numbers: 2; 4; 16; ; (2marks)	

<p>7) Express 5% as a fraction in the lowest terms. (2marks)</p>	
<p>8) Evaluate $\frac{a^2 \div b}{c-d}$, if $a = 3$; $b = -3$; $c = 2$ and $d=5$. (2marks)</p>	
<p>9) Convert: (a) 43,000g = kg (1mark) (b) 5.5 tons = kg (1mark)</p>	
<p>10) Find the circumference of a circle whose radius is 5cm. (Use $\pi=3.14$) (2marks)</p>	
<p>11) Express the number $1\frac{1}{5}$ as a percentage. (2marks)</p>	

12) Use a quick multiplication to calculate the product 84×49 . **(2marks)**

13) If angles k and 70° are supplementary, find the size of angle k . **(2marks)**

14) Solve the equation to find the value of X :
 $3(x+2)=21$ **(2marks)**

15) Is the number 835,879 divisible by 11?
Show how you arrive at the answer. **(2marks)**

16) Find the highest common factor (H.C.F) of 112 and 168. **(2marks)**

<p>17) Find the average age of four children whose respective ages are 4 years, 6 years, 8 years and 10 years. (2marks)</p>	
<p>18) BWUZU bought a shirt at 6,000Frw. He sold it at 7,200Frw. What was his percentage profit? (2marks)</p>	
<p>19) Given the number 500.073, what is the place value: (a) of 5? (1mark)</p> <p>(b) of 7? (1mark)</p>	
<p>20) The cost of 5 bottles of orange juice is 4,000Frw. What is the cost of 3 bottles of the same juice? (2marks)</p>	

21) Arrange the following fractions in descending order: $\frac{3}{8}$; 0.25; $\frac{5}{12}$ **(2marks)**

22) Find the volume of firewood in a stack of 3m by 2m by 3m in decisteres (dst). **(2marks)**

23) Add:
7hours 25minutes + 1hour 45minutes **(2marks)**

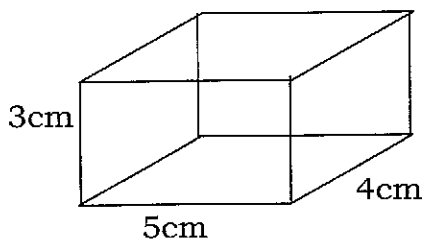
24) Draw the following angles: **(1mark)**
(a) Reflex angle.

(b) Right angle **(1mark)**

25) Calculate: $\frac{1}{2} + \frac{1}{4} - \frac{1}{5}$ (2marks)	
26) Find the lowest common multiple (LCM) of 48 and 64. (3marks)	
27) Change 25_{ten} to base three. (3marks)	
28) If 0.20 of a number is 40, what is the number? (3marks)	
29) Calculate the volume of a cone whose radius is 6cm and height is 10cm. (use $\pi=3,14$) (3marks)	

30) Calculate the sum of interior angles of a regular hexagon. **(3marks)**

31) The figure below is a rectangular prism whose length is 5cm, width 4cm and height 3cm.



Calculate:

(a) the total surface area. **(5marks)**

(b) the volume. **(2marks)**

32) The table below shows how primary six (P6) class scored in English Test marked out of 100.

Marks	60	40	70	35	10	15
Frequency	8	1	3	4	5	4

(a) Complete the table across. **(4marks)**

(b) How many pupils are in P6? **(1mark)**

(c) Find the average mark of the class? **(2marks)**

(a)

Marks (x)	Frequency (f)	(fx)
70	3	
	Sum of (f)=	Sum of (fx)=

(b)

(c)

33) In a class of 16 pupils, 8 pupils like English, 10 pupils like Mathematics and x pupils like both subjects. Each pupil likes at least one of the subjects.

(a) Represent this information on a Venn diagram. **(3marks)**

(b) Find, x , the number of pupils who like both subjects. **(4marks)**

34) A man spent $\frac{1}{3}$ of his money on buying food, and $\frac{1}{6}$ of the remainder on communication.

(a) What fraction of his money was he left with? **(5marks)**

(b) If he was left with 15,000Frw, how much did he have at the beginning? **(2marks)**

35) A trader borrowed 600,000Frw from a bank at an interest rate of 6% per year.

(a) How much interest must he pay after five (5) months? **(5marks)**

(b) What amount will the trader pay altogether? **(2marks)**