

Mathematics

PM

18/07/ 2022 09: 00-11: 00 AM



Pupil's complete index number

Province/	District	Sector	School	Level	Pupil	Year
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, 2021-2022
MATHEMATICS

Duration: Two hours

Marks:

INSTRUCTIONS

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

ATTEMPT ALL QUESTIONS IN THIS PAPER (100 marks)

Do rough work below each question	Show the working steps and final answer in this column
1) Write the following number in figures: Nine million nine thousand eighty seven. (2 marks)	
2) Write the place value of digits 7 and 1 in the number 180,493.27 (2 marks)	
3) Arrange the following numbers from the lowest to the highest $\frac{2}{3}$; 1 ; 0.5 ; 100; -100; 0.82; -1; 5 (2 marks)	
4) Convert 432,000sec=....days ...hours (2 marks)	
5) Find the next two numbers in the following sequence 3; 9; 27; 81;;..... (2 marks)	
6) Use the divisibility test method to check if 23,760 is divisible by 11. (2 marks)	
7) Solve $4x - 8 = 10x - 20$ (2 marks)	
8) Workout $\frac{3}{4}x(\frac{2}{5} + \frac{3}{7}) =$ (2 marks)	

9) Calculate $4.5kg + 113dag = \dots kg$ (2 marks)

10) 4 % of the learners in P5 are boys. If there are 45 boys in the class, how many learners are in the class? (2 marks)

11) Simplify $\frac{\sqrt{225} + \sqrt{169}}{\sqrt{16}} =$ (2 marks)

12) Calculate the sum of 524,321 and 17,674,329. (2 marks)

13) One Mathematics book costs 5,200Frw. How much do 8 similar books cost? (2 marks)

14) Multiply 896,327 by 121. (2 marks)

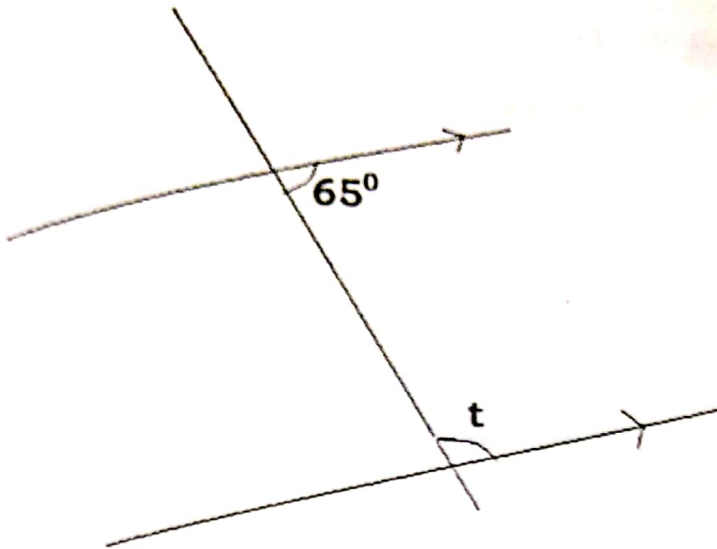
<p>15) Use quick multiplication to calculate $625 \times 99 =$ (2 marks)</p>	
<p>16) Workout the following without using a number line a) $(-6) + (+2) =$ (1 mark) b) $(+12) \times (-8) =$ (1 mark)</p>	
<p>17) Find the greatest common Factor (GCF) of 24; 36 and 40. (2 marks)</p>	
<p>18) A class has 56 pupils. There are 14 boys in the class. Find the ratio of boys to girls in the class. (2 marks)</p>	

19) Gakire has 12 notes of 2,000Frw, 20 notes of 5,000Frw, 15 notes of 500Frw and 10 coins of 100Frw. Calculate the total amount of money that Gakire has. **(2 marks)**

20) Round off 4,620,850 to the nearest hundred thousands. **(2 marks)**

21) Simplify $5^6 \times 5^2 \div 5^3 =$ **(2 marks)**

22) Find the size of angle t in the figure below.
(2 marks)



23) Convert $\frac{10}{16}$ into a decimal number.
(2 marks)

24) During COVID-19 Lockdown, a certain cell volunteers distributed equally 7,827,831 kg of beans among 333 families. How many kilograms did each family get? (2 marks)

25) Use measurement table to convert the following:

a) $26\text{dm}^3 = \dots\dots\dots\text{hg}$

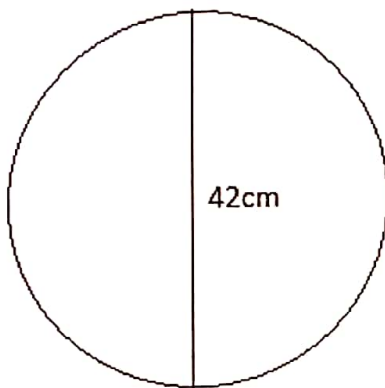
(1 mark)

b) $9,700\ell = \dots\dots\dots\text{m}^3$

(1 mark)

26) Calculate the circumference of the figure below
(use $\pi = \frac{22}{7}$)

(3 marks)



27) Electric poles are fixed 20 metres apart. Find the distance from the first to 101th pole.

(3 marks)

28) A man covered 120 km of a journey. This is only $\frac{3}{4}$ of the whole journey. Calculate the total distance covered for the whole journey. **(3 marks)**

29) A trader bought a Radio at 950,000 Frw. He later sold it to a customer at 1,250,000Frw. What was his percentage profit? **(3 marks)**

30) The LCM of two numbers is 40. One of the numbers is 20. If their GCF is 5, find the second number. **(3 marks)**

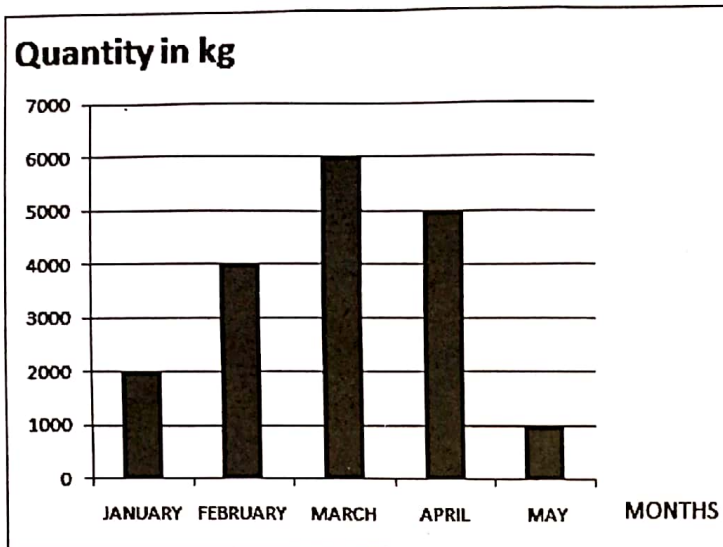
31) (a) The area of a rectangular table is $160m^2$. If its width is $8m$. Find the length of the table. **(3 marks)**

(b) A wooden box has a volume of $9,000,000cm^3$. If Its length is 2 m and width 1.5 m.

(i) Find its area. **(2 marks)**

(ii) Find its height. **(2 marks)**

32) Study the graph below which shows the potatoes in kg sold at a shop in 5 months and answer the questions that follow.



- (a) In which month did the shopkeeper sell the highest quantity of potatoes? **(1 mark)**
- (b) In which month did the shopkeeper sell the smallest quantity of potatoes? **(1 mark)**
- (c) Find the total kilograms of potatoes sold in all the five months **(2 marks)**
- (d) If one kg of potatoes costs 550Frw, how much money did the shopkeeper get from the sale of potatoes in all five months? **(3 marks)**

33) A P6 pupil was sent to the market with 30,000frw to buy the items shown in the table below.

a) Complete the table.

(5 marks)

Items	Price/cost per item	Total amount
3kg of beans /Kg	3,000frw
6kg of sugar	1,500frw/kg
5kg of meat	... /Kg	15,000frw
..... Loaves of bread	800frw/loaf	2,400frw

Total expenditure

.....Frw

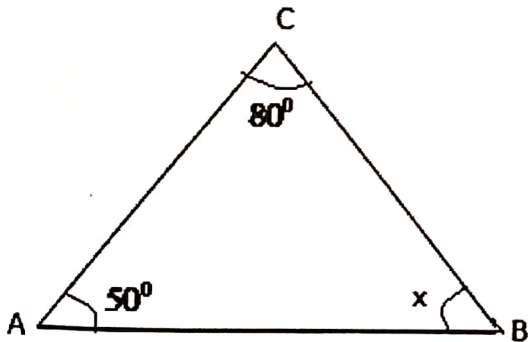
b) Find the balance

(2 marks)

Balance Frw

34) (a) Find the value of angle x in the triangle CAB below.

(3 marks)



(b) Two Vehicles A and B moved towards each other. They started moving at 9:00 am and met at 11:00 am. Their speeds were 60 km/hr and 55 km/hr respectively. What distance had each covered by the time they met? **(4 marks)**

35) (a) By using the following digits 8; 0; 5; 7; 1; 6. Write the biggest whole number formed by these digits. **(2 marks)**

(b) A businesswoman has 300 kg/600kg of mixed beans which she sells at 280Frw/kg. If the mixture contains 200kg of the first type which cost 360Frw/kg. Find the price of one kg of the second type. **(5 marks)**

END