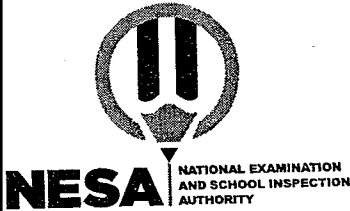


Mathematics

PM

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



**Pupil's complete index number**

Province/ City	District	Sector	School	Level	Pupil	Year
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**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:

/100

**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)**

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

<p>9) Calculate <math>4.5kg + 113dag = \dots kg</math> <b>(2 marks)</b></p>	
<p>10) 4 % of the learners in P5 are boys. If there are 45 boys in the class, how many learners are in the class? <b>(2 marks)</b></p>	
<p>11) Simplify <math>\frac{\sqrt{225} + \sqrt{169}}{\sqrt{16}} =</math> <b>(2 marks)</b></p>	
<p>12) Calculate the sum of 524,321 and 17,674,329. <b>(2 marks)</b></p>	
<p>13) One Mathematics book costs 5,200Frw. How much do 8 similar books cost? <b>(2 marks)</b></p>	
<p>14) Multiply 896,327 by 121. <b>(2 marks)</b></p>	

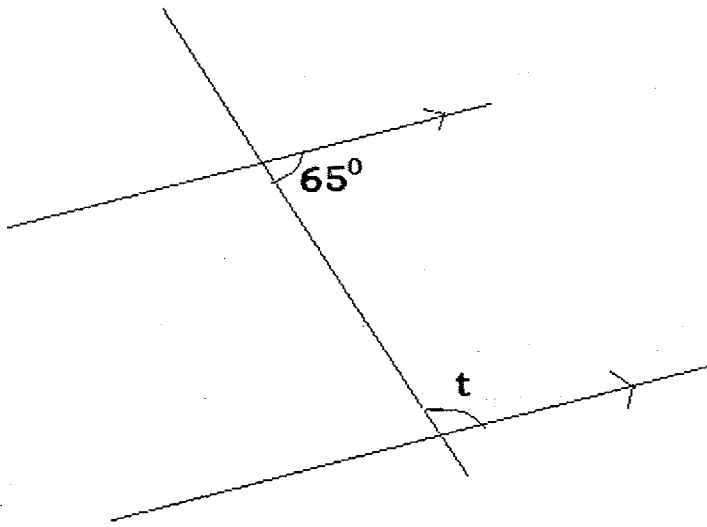
15) Use quick multiplication to calculate $625 \times 99 =$ <b>(2 marks)</b>	
16) Workout the following without using a number line a) $(-6) + (+2) =$ <b>(1 mark)</b> b) $(+12) \times (-8) =$ <b>(1 mark)</b>	
17) Find the greatest common Factor (GCF) of 24; 36 and 40. <b>(2 marks)</b>	
18) A class has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

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)

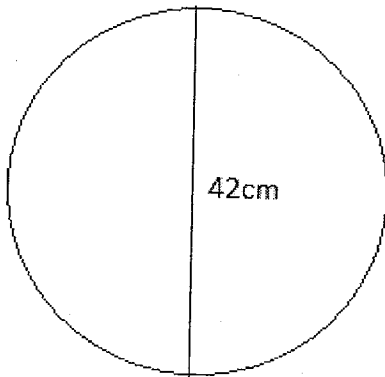
24) During COVID-19 Lockdown, a certain cell volunteers distributed equally 7,827,831 kg of beans among 333 families. How many kilograms did each family get? (2 marks)

25) Use measurement table to convert the following:

a)  $26dm^3 = \dots\dots hg$  **(1 mark)**

b)  $9,700\ell = \dots\dots m^3$  **(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 101<sup>th</sup> 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 1,250,000 Frw. What was his percentage profit? **(3 marks)**

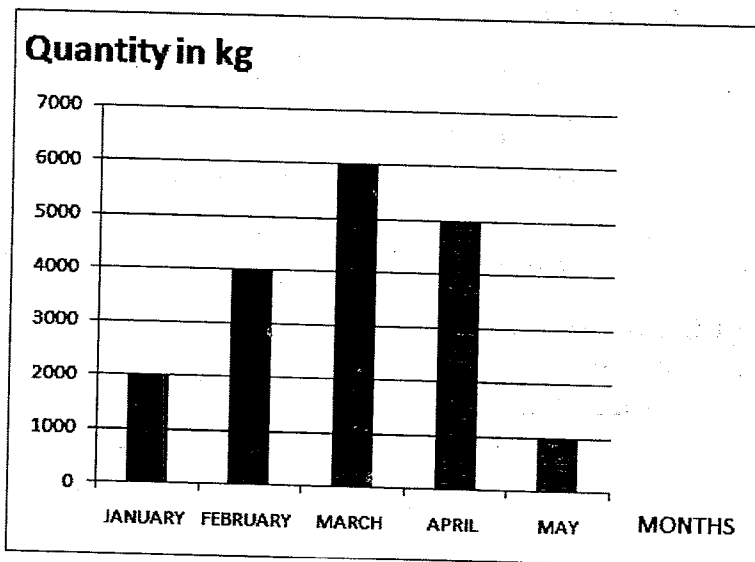
30) The LCM of two numbers is 40. One of the numbers is 20. If their GCF is 5, find the second number. **(3 marks)**

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.



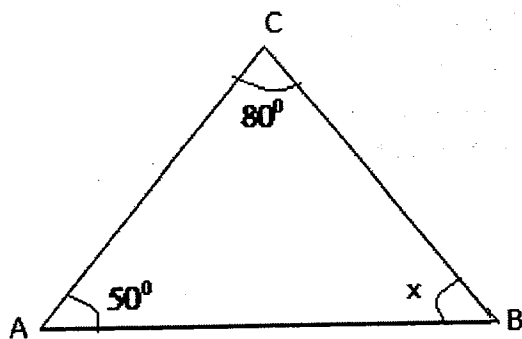
- (a) In which month did the shopkeeper sell the highest quantity of potatoes? **(1 mark)**
- (b) In which month did the shopkeeper sell the smallest quantity of potatoes? **(1 mark)**
- (c) Find the total kilograms of potatoes sold in all the five months **(2 marks)**
- (d) If one kg of potatoes costs 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 <b>(2 marks)</b>		
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**