YEAR 2014

PUPIL'S COMPLETE INDEX NUMBER

Province/City	District	Sector	School	Pupil

PUPIL'S FULL NAME

SUR NAME: _____

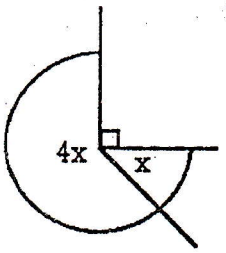
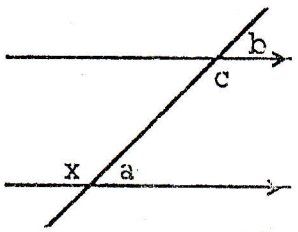
OTHER NAMES: _____

REVISION OF EXTRACTED QUESTIONS FROM PRIMARY LEAVING EXAMINATION 2014

MATHEMATICS

Duration: 2 hours

1	Add: 563,091 + 36,909 (2 marks)	2	(a). What is the place value of 0 (zero) in the figure 460,123? (1 mark) (b). Write in figures: Six million, eight hundred thousand, twenty six. (1 mark)
3	What is the square root of 2.25? (2 marks)	4	Subtract: $0.2hm^2 - 4dam^2 =$ _____ m^2 (2 marks)
5	Add and express the answer in binary: $101_{two} + 10_{three}$ (2 marks)	6	Calculate: 2h 30min – 1h 45min (2 marks)

7	In the figure below, find the value of x. (2 marks)  	8	Find the mean of: 9, 3, 1, 8, 4 and 5.(2 marks)
9	How many lines of symmetry does; (a). a rectangle have? (1 mark) (b). a square have? (1 mark)	10	In the figure below, which of the angles a, b or c is equal; (2 marks) (a). to angle x? (b). to angle a? 
11	Find the area of a square whose perimeter is 18cm. (2 marks)	12	Express 105 as a product of its prime factors. (2 marks)
13	Solve for x: $2x - 1 = 2 - x$ (2 marks)	14	Calculate the Highest Common Factor (HCF) of 9, 12 and 15. (2 marks)
15	In a class of 40 pupils, the ratio of boys to girls is 2:3. Find the; (a). number of girls in the class. (1 mark) (b). number of boys in the class. (1 mark)	16	In a school of 1,200 pupils, 60% weigh 40kg or more. How many pupils weigh less than 40kg? (2 marks)

17 (a). Six books cost 2,400Frw altogether. How many similar books can be bought with 5,000Frw? (1.5 marks)

(b). How much money will remain? (0.5 mark)

18 A pupil scored 28 marks out of 40. Express the pupil's marks as a percentage. (2 marks)

19 A water tank contains 6,000litres of water. If a tap is opened and releases water at 20 litres per minute, how long will it take the tank to become completely empty? (2 marks)

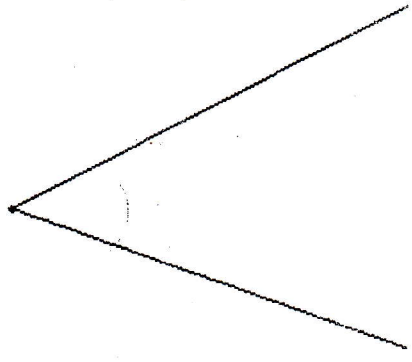
20 Simplify completely: $\left(\frac{3}{5} \div \frac{4}{5}\right) \times \frac{4}{9}$ (2 marks)

21 Evaluate: $\frac{4mp + 3n}{n}$ when $m = -3$, $n = 6$ and $p = -2$ (2 marks)

22 Set A = {all prime numbers between 0 and 14} and
Set B = {all odd numbers between 0 and 14}.
(a). List the elements of $A \cap B$ (1 mark)

(b). Represent the information in a Venn diagram showing elements in each set. (1 mark)

23 (a). Measure the acute angle below and write its size. (1 mark)



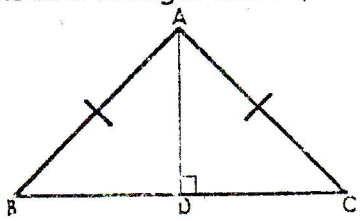
(b). Using a pair of compasses and ruler, bisect the acute angle above. (1 mark)

24 Find the percentage profit on a bicycle bought at 55,000Frw and sold at 66,000Frw. (2 marks)

25 The total surface area of a sphere is $5{,}544cm^2$. Find its volume. (2 marks)

26 In the triangle ABC, $\overline{AD}$ is perpendicular to $\overline{BC}$, $\overline{AB} = \overline{AC}$ and angle ABC = 45°.

(a). Find the size of angle CAD. (2 marks)

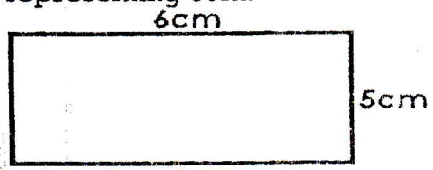


(b). What is the name given to the triangle ABC? (1 mark)

27 Arrange the following fractions in ascending order:

$0.42, \frac{11}{25}, \frac{12}{30}, 0.41$ (3 marks)

28 A rectangular flower garden is represented by a scale drawing below with a scale 1cm representing 10m.



Calculate:

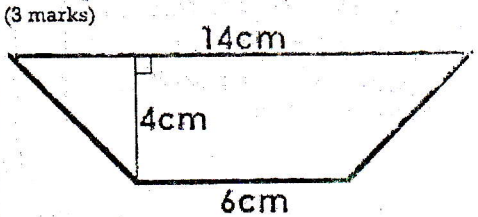
(a). the actual length of the garden. (1 mark)

(b). the actual width of the garden. (1 mark)

(c). the surface area of the garden. (1 mark)

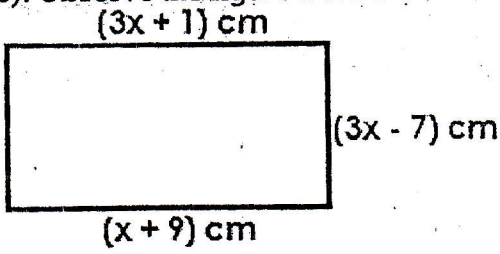
29 An interest of 20,000Frw was made after 2 years at a simple interest rate of 10% per year. Find the amount of money invested. (3 marks)

30 The figure below is a trapezium. Find its area. (3 marks)



31 (a). If $a = -1$, $b = 2$ and $c = 3$, find the value of $2a^2b - ac$. (2 marks)

(b). Observe the figure below and answer the questions that follow.



(a). Name the figure. (1 mark)

(b). Calculate the value of x. (2 marks)

(c). Calculate the perimeter and the surface area of the figure. (2 marks)

32 A sum of 3,000,000Frw is invested for 2 years at a compound interest of 5% per year. What is the

(a). interest after 2 years? (5 marks)

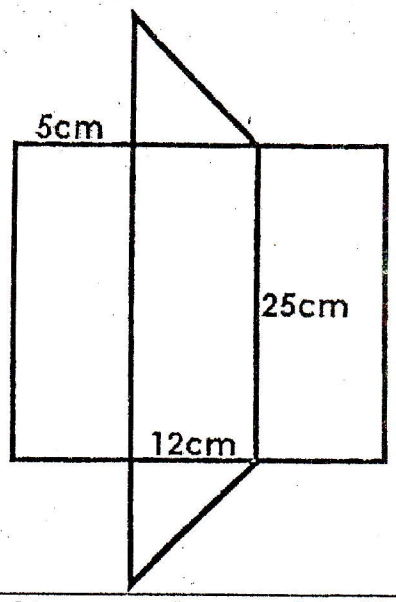
(b). Amount of money after 2 years? (2 marks)

33 The height of a cylinder is 10cm and its base circumference is 44cm. $\left(\pi = \frac{22}{7}\right)$. Find the

(a). Volume of the cylinder. (3 marks)

(b). Total surface area of the cylinder. (4 marks)

34 The figure below shows the development (net) of a certain prism.



(a). Calculate the volume of the prism. (2 marks)

(b). calculate the total surface area of the prism. (5 marks)

35 Below are marks scored by 20 pupils in a Mathematics test marked out of 20 marks.

10	11	12	15	8
11	16	10	12	10
11	12	8	10	16
10	8	10	8	12

(a). Complete the frequency table below. (4 marks)

Marks (x)	Frequency (f)	fx
	Total f =	Total fx =

(b). Find the mode mark. (1 mark)

(c). Calculate the mean mark. (2 marks)

"END"