

# YEAR 2003

## PUPIL'S COMPLETE INDEX NUMBER

Province/City

--	--

District

--	--

Sector

--	--

School

--	--

Pupil

--	--	--

## PUPIL'S FULL NAME

SUR NAME: \_\_\_\_\_

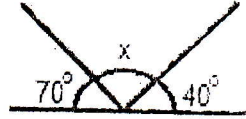
OTHER NAMES: \_\_\_\_\_

## REVISION OF EXTRACTED QUESTIONS FROM PRIMARY LEAVING EXAMINATION 2003 MATHEMATICS

Duration: 2 hours

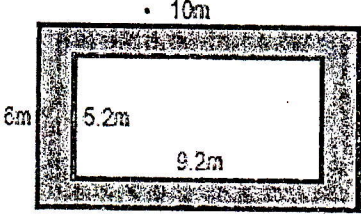
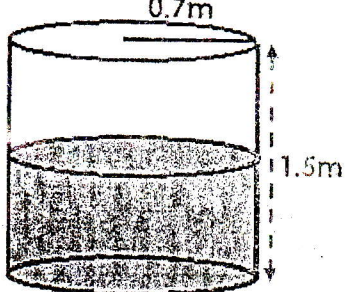
### SECTION A (65 MARKS)

1	Multiply $405.2 \times 2.5$ (2 marks)	2	Find the average of 4, 5, 8 and 3 (2 marks)								
3	Change the following Roman number XXV into an ordinary number (2 marks)	4	How many lines of symmetry does a square have? (2 marks)								
5	Use one of the following symbols: $<$ , $>$ or $=$ to complete the fractions. (2 marks)  $0.65 \quad \frac{3}{5}$	6	Fill in the missing numbers (2 marks) <table border="1"><tr><td>3</td><td>4</td><td>5</td><td></td></tr><tr><td>10</td><td>13</td><td></td><td>19</td></tr></table>	3	4	5		10	13		19
3	4	5									
10	13		19								

7	Write in a short form: (2 marks) $3y + 5x - 2y + x$	8	In the diagram below, all the lines are straight. Find the size of angle $x$ (2 marks) 
9	Write the next two numbers in the following sequence: (2 marks)  1, 2, 3, 5, 8, _____, _____	10	A boy got 201 out of 300 marks in an examination. Calculate the percentage marks the boy scored. (2 marks)
11	Express 20 in terms of its prime factors. (2 marks)	12	The weight of a liquid is 1360g and its volume is $100\text{cm}^3$ . Find the density of the liquid. (2 marks)
13	Express 0.04 as a fraction in its simplest form (2 marks)	14	Write the following words in numerals: Fifteen thousand and one. (2 marks)
15	Simplify: $\frac{1}{8} \times 88 \times \frac{1}{11}$ (2 marks)	16	Calculate and simplify the following: $\left(\frac{2}{15} \div \frac{1}{3}\right) \times \frac{1}{2}$ (2 marks)

17	Express 20cm as a fraction of 2m and simplify your answer. (2 marks)	18	Simplify: $5^2 + \sqrt{64}$ (2 marks)
19	Add 1hr and 40mins and write your answer in seconds. (2 marks)	20	Find the sum of the HCF and LCM of 8 and 6. (2 marks)
21	Subtract and simplify your answer: $1\frac{1}{3} - \frac{5}{6}$ (2 marks)	22	The width of a rectangle is 20cm and it's length is 30cm. Calculate the perimeter of the rectangle. (2 marks)
23	Complete the following: $2.4\text{km}^2 + 2.4\text{hm}^2 = \text{_____ m}^2$ (2 marks)	24	Arrange the following in ascending order: $\frac{1}{5}, \frac{11}{45}, \frac{21}{90}$ (2 marks)



<p>25 The radius of a circle is 5cm. Calculate the circumference of that circle. (<math>\pi = 3.14</math>) (2 marks)</p>	<p>26 A man bought a bed at 80 000frw. He sold the bed and made a profit of 5%. How much money did the man sell the bed? (3 marks)</p>
<p>27 Paul and Peter shared 2100frw. Paul received two times as much as Peter received. How much money did each person receive? (3 marks)</p>	<p>28 Use a scale of 1cm on a paper to represent 10km on land and find: (a) The length on land when the length on the paper is 15cm. (1.5 marks)  (b). The length on a paper when the length on the land is 8km. (1.5 marks)</p>
<p>29 The figure below represents a rectangular garden with a path around it. The outer part of the path is also rectangular. Calculate the area of the path which is the shaded part in the diagram. (3 marks)</p> 	<p>30 A cylindrical tank is half full of water. The radius of a tank is 0.7m and the height is 1.5m. Calculate the volume of the water in the tank. Take (<math>\pi = \frac{22}{7}</math>) (4 marks)</p> 

**SECTION B (Choose any 5 questions-35 marks)**

31 A sum of 60 000frw is banked at a compound interest rate of 6% per year. Calculate

(a). The total interest after 3 years (5 marks)

(b). The total amount of money in the bank for the 3 years if no money was withdrawn. (2 marks)

32 Simplify completely the following algebraic expression:

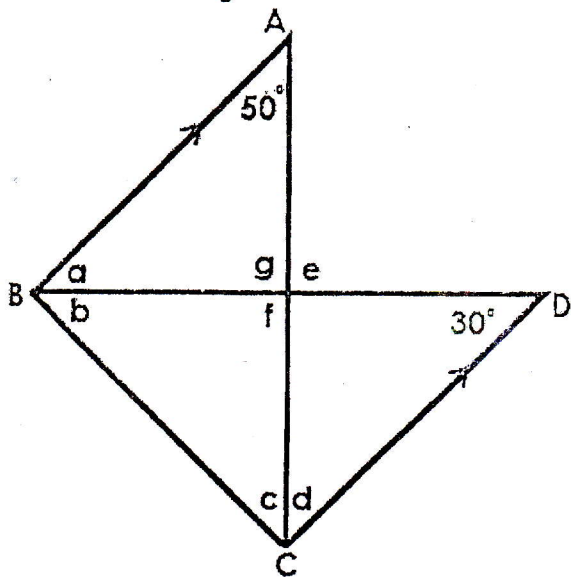
(a).  $4(m - n + 5) - 3(m - 2n + 2)$  (3 marks)

(b). Solve the equation:  $\frac{x}{5} - \frac{1}{2} = \frac{3}{10}$  (2 marks)

(c). Find the value of  $3ab - bc + 6a$ , if  $a=2$ ,  $b=3$  and  $c=0$  (2 marks)

33 John is 25 years younger than his father. After 5 years, John's father will be 2 times as old as his son will be. Calculate the ages of the father and the son now. (7 marks)

- 34 In the figure below, triangle ABC is an isosceles triangle and line AB is parallel to line CD. Angle  $BAC = 50^\circ$  and angle  $BDC = 30^\circ$ .



Calculate the sizes of angles a, b, c, d, e, f and g (7 marks)

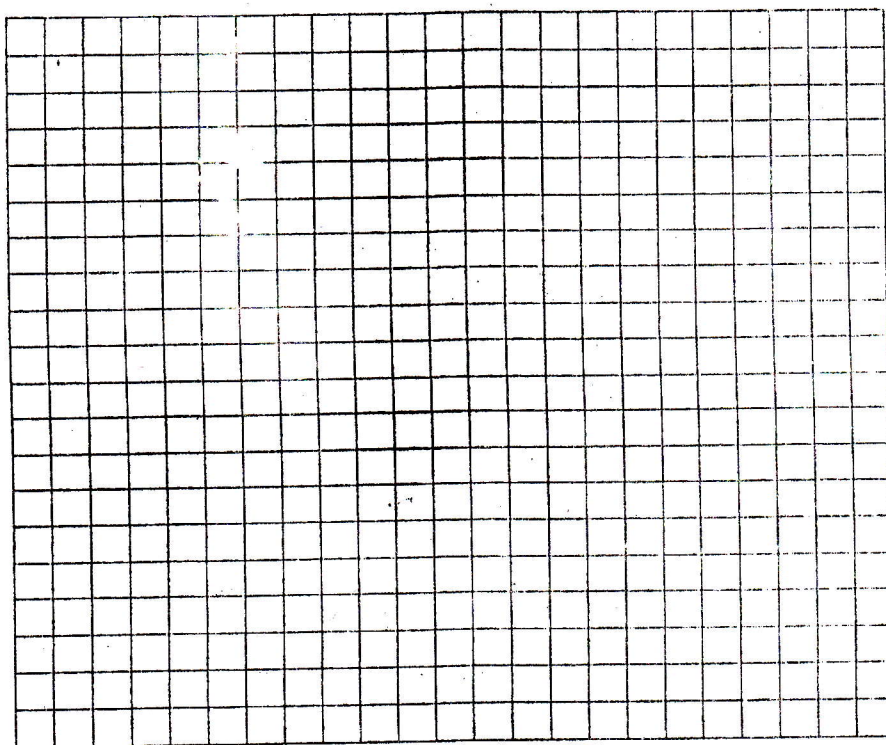
- 35 40 children use 24kg of sugar in 30 days. All children use equal quantities of sugar each day.  
(a). If there are 50 children, in how many days would they use 24kg of sugar? (3.5 marks)

(b). How many children would use 14kg of sugar in 35 days? (3.5 marks)

- 36 The distance from town A to town B is 200km. A car leaves town A at 7:00am and travels at an average speed of 60km/hr. On the same day a bus leaves town A at 8:00am and travels at an average speed of 90km/hr. If both vehicles don't stop on the way, at what distance from town A does the bus catch up with the car? (7 marks)



- 37 You are given the following points and their coordinates:  $O(0, 0)$ ,  $A(1, 1)$ ,  $B(2, 2)$ ,  $C(3, 3)$ ,  $D(4, 4)$  and  $E(5, 5)$ . (7 marks)



- (a). Plot the coordinates of these points on the squared paper above and write the letters which correspond to the points.  
(b). Join the points with a line  
(c). From the graph, complete the co ordinates of:  $F(0, 5, \quad)$ ,  $G(\quad, 2, 5)$ .