YEAR 2007

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 2007
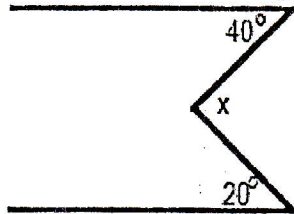## MATHEMATICS
Duration: 2 hours

SECTION A (65 MARKS)

1 Simplify completely $\left(\frac{5}{6} \times 2\right) \div \frac{1}{9}$ (2 marks)

2 Calculate $\frac{2}{3}$ of 900g and give your answer in kg (2 marks)

3 Express 858 as a product of it's prime factors. (2 marks)

4 Solve: $3m + 4 = 5m - 2$ (2 marks)

5 Write 1960 in Roman numerals (2 marks)

6 Find the Lowest Common Multiple of 21, 45 and 50. (2 marks)

7	Calculate the volume of a cube whose total surface area is 150cm². (2 marks)	8	Remove the brackets and simplify (2 marks) $$5(2y + x) + 2(x - 4y)$$

9 Find the value of angle marked x (2 marks)

10 Complete the table below (2 marks)

2	____	8	12
5	17	65	____

11 The sum of three consecutive odd numbers is 57. Find those three numbers (2 marks)

12 Simplify completely: $\dfrac{3.2 \times 2.8}{0.7 \times 8}$ (2 marks)

13 What number when increased by 15% becomes 3450? (2 marks)

14 Complete 1hour 3minutes 2seconds = ___seconds (2 marks)

15 A book costing 2400frw is sold at 2640frw. Calculate it's percentage profit (2 marks)

16 Show that 70470 is exactly divisible by 9 without using long division. (2 marks)

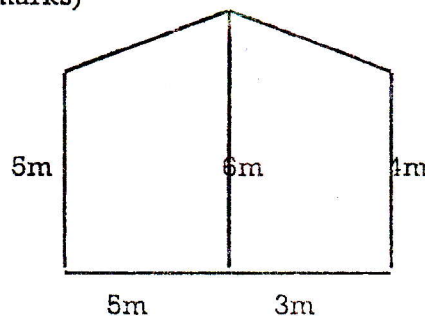| 17	Find the value of $m^2 + 2ab - n$ if $m=2$, $b=\bar{1}$, $a=3$ and $n=\bar{4}$. (2 marks)	18	Share 28 000frw between John and Peter in the ratio of 2:3 respectively. (2 marks)
19	One interior angle of a regular polygon is 120°. How many sides does the polygon have? (2 marks)	20	The volume of a substance is $60m^3$ and it's density is $1.26kg/m^3$. Find the mass of the substance (2 marks)
21	The speed of a moving car is 60km/hr. The car maintains this speed for 1 hour 20 minutes. What is the distance travelled by the car? (2 marks)	22	A chapter in a Mathematics text book is printed from page 141 to 212. How many pages is this chapter printed on? (2 marks)
23	Calculate the area of a triangle whose base is 7cm and height is 16cm. (2 marks)	24	5 men take 4 days to paint a house. How many days will 8 men take to paint the same house? (Assuming all men work at the same rate) (2 marks)

25	Write the next two numbers in the sequence below: (2 marks) 2, 4, 12, 48, _____ , _____	26	A car travels 35km on 2.5 litres of petrol. How much does it cost to travel 280km if the cost of 1 litre of petrol is 600frw? (3 marks)
27	How many revolutions does a bicycle wheel of 70cm diameter make to cover a distance of 8.8km? $\left(\pi = \frac{22}{7}\right)$ (3 marks)	28	Calculate the area of the figure below (3 marks) 5m 6m 4m 5m 3m
29	The cost of 3kg of potatoes and 4kg of beans is 840frw. The cost of 1kg of beans is 70frw more than the cost of 1kg of potatoes. Find the cost of 1kg of beans. (3 marks)	30	The simple interest on a capital of 800 000frw after 3 months is 12 000frw. Find the interest rate per year. (3 marks)

31 The diagonals of a rhombus are 10cm and 24cm.
(a). Calculate the area of the rhombus. (3 marks)
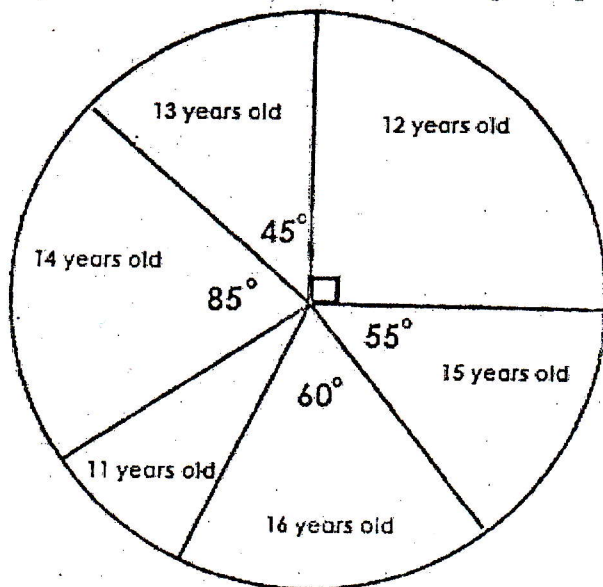
(b). Calculate the perimeter of the rhombus. (4 marks)

32 Simplify completely: $\dfrac{\frac{1}{5} \times \left(6\frac{3}{4} - 4.75\right) \times \left(3.875 - 2\frac{3}{8}\right)}{(1.5 \times 1.5) \div 2\frac{1}{2}}$ (7 marks)

33 David sold cars with a total value of 90 000 000frw for the importer. He received a 10% commission on the first 50 000 000frw and 3% on the rest. How much money does the importer receive if he pays a tax of 5%?

34 (a). Solve: $\dfrac{2x-4}{x} - \dfrac{6x+2}{2x} = 0$ if x is not equal to 0.

(b). The product of a number with four is equal to the sum of that number with 6. Find that number.

35 The pie chart below shows different ages of pupils in a certain primary school.

(a). If 10 students have 11 years each, how many pupils are represented in the pie chart?

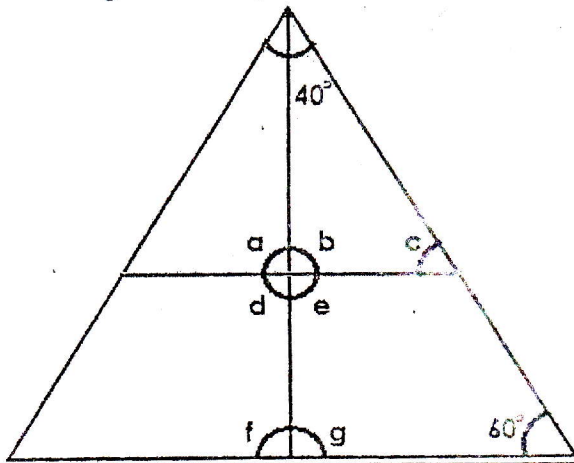(b). How many pupils are;
(i). 12 years old?
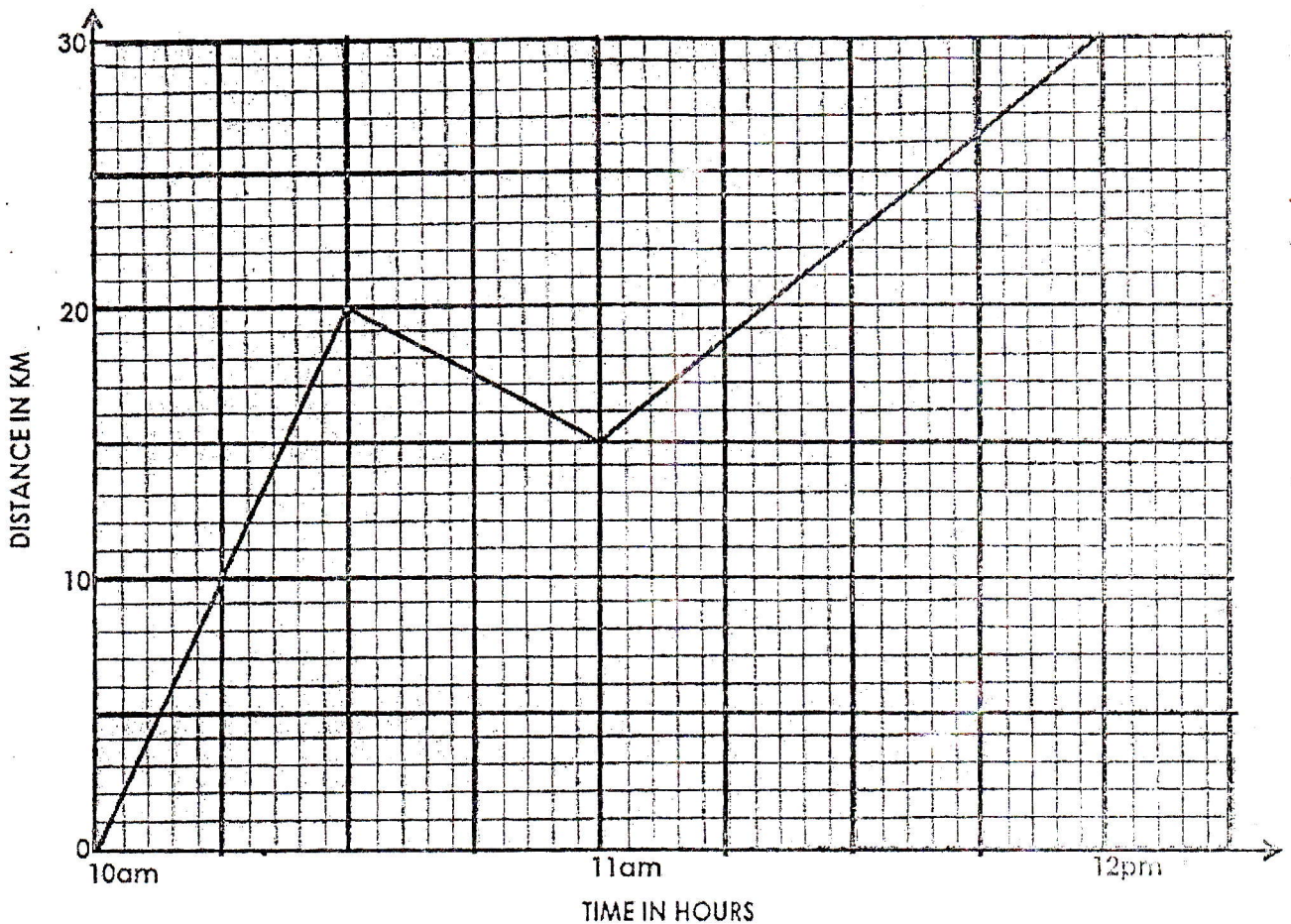
(ii). 13 years old?

(iii). 14 years old?

(iv). 15 years old?

(v). 16 years old?

36	In the figure below, find the measure of unknown angles marked with letters. (7 marks)

37	The graph below shows a journey of a person who visited a friend in another village.

TIME IN HOURS

(a). How far did the person travel after 15 minutes?

(b). At what time did the person turn back towards his home?

(c). What distance does the person travel towards his home after turning back?

(d). How far was the person from his home 1 hour after starting the journey?

(e). Find the average speed for the whole journey