## PRIMARY SEVEN MATHEMATICS

Time allowed: 2 hours 30 minutes

Index	No.					
Cand	idate's Name:					
Cand	idate's Signature:					
Scho	ol Name:					
Read	the following instructions carefully:					
1.	The paper has <b>two</b> sections: <b>A</b> and <b>B</b>	FOR EXAMINER'S USE ONLY				
2.	Section A has 20 short questions (40 marks)					
3.	Section <b>B</b> has 12 questions (60 marks)					
4.	Answer <b>ALL</b> questions. All answers to both Sections A	FOR EXAMINER'S USE ONLY				
	and B must be written in the spaces provided.		ONLI			
5.	All answers must be written using a blue or black ball	Qn. No	MARK	SIGN		
	point pen or ink. Diagrams should be drawn in pencil.	1 – 10				
6.	Unnecessary alteration of work may lead to loss of marks.	11 – 20				
7.	Any handwriting that cannot be easily read may lead to	21 – 30				
	loss of marks.	31 – 32				
8.	Do <b>not</b> fill anything in the boxes indicated for Examiner's	TOTAL				
<b>J.</b>	Do Hot III allything in the boxes indicated for Examiner 5					

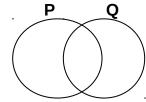
use only.

## SECTION A: (40 MARKS)

1. Work out: 10 x 12

2. Expand 634 using values.

3. Shade Q' in the diagram below.



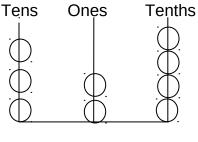
4. Multiply: 5 x 3 = \_\_\_\_\_

Draw groups to find the answer.

5. How many squares are in the next grouping in the pattern?

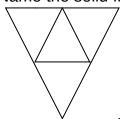


6. What number is shown on the abacus below?



7. 24 pencils cost Shs. 6000. How many dozens of pencils can one buy with Shs. 18000?

8. Name the solid figure whose net is shown below.

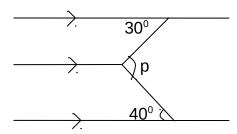


9. Express  $\frac{1}{50}$  as a decimal fraction.

- 10. The average of 3, 8, 12, x, 15 and 18 is 11. Find the value of x.
- 11. A thief broke into our house at eight minutes to mid-night. Express this time in a 12 hour clock system.

12. Solve: If a = 8 and b = 6, find the value of ab 2b

13. Calculate the value of angle p



.

14. Given that this cup litres.

15. Simplify:  $1\frac{1}{5} \times \frac{5}{6}$ 

16. Simplify:  $^{-}6 + -2 + ^{+}8$ 

17. Maria is standing facing South East direction. If she turns anti-clockwise through an angle of 135°, in which direction will she face?

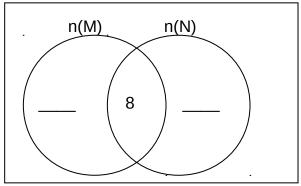
18. Solve: 3(p-2) = 6

19. In a school of 900 pupils, 55% are boys. How many girls are there?

20. Multiply:  $4 \times 7 = ____(finite 8)$ 

## **SECTION B: (60 MARKS)**

- 21. Given that n(M) = 25, n(N) = 20 and  $n(M \cap N) = 8$ .
  - (a) Represent the information on the venn diagram below. (2 marks)



(b) Find: (i)

$$n(N - M)$$

(1 mark)

(ii) n(M - N)

(1 mark)

(iii)  $n(M \cup N)$ 

(1 mark)

22. (a) Solve:

Solve: 
$$3(y-2) - 4(y-2) = 7$$

(3 marks)

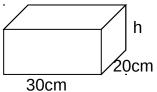
(b) A farmer is thrice as old as his daughter. Their total age is 60 years. How old is the daughter. (2 marks)

23. Complete the magic square below.

(6 marks)

18		16
	15	
14		

24. The figure below is a rectangular tin whose volume is 3.6 litres.



(a) Find the value of h.

(3 marks)

(b) Find the area of its base.

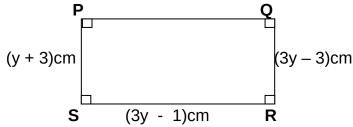
(2 marks)

25 (a) The cost of a pen and a book are in the ratio of 5:3 respectively. If a pen costs Sh. 21000; What is the cost of a book? (2 marks)

(b) 45 out of 50 pupils in Primary Seven like Maths. The rest like English. What percentage of the pupils like English? (2 marks)

26.	Using a ruler, a pencil and a pair of compasses only, construside 6cm and measure the length of the diagonal.	ıct a square with (6 marks)
27	Mariam went shopping and bought the following items; 2 loaves of bread at Shs. 3500 per loaf. ½ kg of meat at Shs. 8000 per kg. ½ litre of cooking oil at Shs. 1500. 750 gm of rice at Shs. 4000 per kg.	
	(a) How much money did she spend?	(4 marks)

- (b) If she was given change of shs. 1500, how much money did she go with? (1 mark)
- 28. Use the figure below to answer the questions that follow.



(a) Find the value of y.

(2 marks)

(b) Calculate the area of rectangle **PQRS**. (3 marks)

(c) Find length of  $\overline{PR}$ .

(1 mark)

29. Simplify:

(a) 2.36 - 8.4 + 9.07

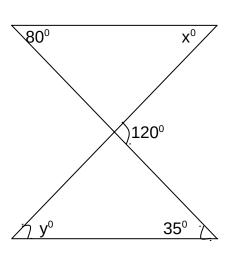
(2 marks)

(b)  $\left(\frac{3}{5} - \frac{1}{3}\right) \div \frac{1}{5}$ 

(2 marks)

A car takes 3 hours to cover a certain journey at 60km/hr but it takes only 2 hours to return through the same distance. Calculate average speed for the whole journey. (5 marks)

31. Study the diagram below and use it to answer questions that follow.



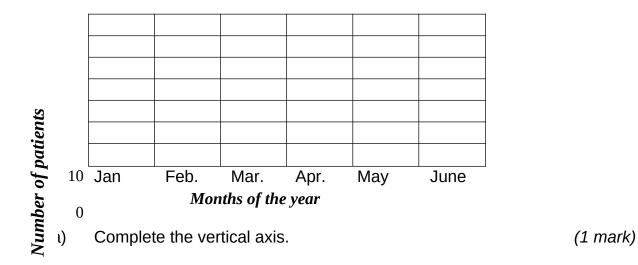
(a) Calculate the value of angle x. (2 marks)

(b) Calculate the value of angle y.

(2 marks)

32. The table below shows malaria patients who reported at a certain hospital in the first half of the year.

Months o	of the year	Jan	Feb.	Mar.	Apr.	May	June
Number	of patients	50	30	25	30	40	65



- (b) Draw a bar graph to represent the information. (2 marks)
- (c) If each patient was paying Sh. 20000 for consultation, how much money did the hospital collect in June? (2 marks)

Good Luck