MBARARA MUNICIPAL COUNCIL SCHOOLS

PRIMARY LEAVING MOCK EXAMINATION, 2019

MATHEMATICS

Time Allowed: 2 hours 30 minutes

	EMIS No.						Personal No.		
Index No.									

Candidate's Name .....

Candidate's Signature .....

EMIS No. .....

District Name .....

Read the following instructions carefully:

1. This paper has **two** sections: **A** and **B**. Section **A** has **20** questions and Section **B** has **12** questions. The paper has **16 printed pages** altogether.
2. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
3. **All** working must be done using a **blue** or **black** ball point pen or ink. Any work done in pencil other than graphs and diagrams will **not** be marked.
4. **No calculators** are allowed in examination room.
5. Unnecessary **changes** in your work may lead to **loss** of marks.
6. Any handwriting that **cannot** easily be read may lead to **loss** of marks.
7. Do **not** fill anything in the table indicated: **"For Examiners' Use Only"** and boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn. No.	Marks	EXR'S NO
1– 5		
6 - 10		
11-15		
16 -20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

SECTION A : 40 MARKS.

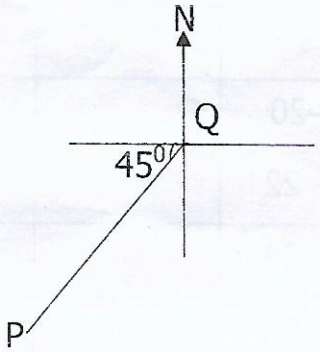
Answer **all** *questions in this section.*

Questions **1** *to* **20** *carry* **two** *marks each.*

1. Subtract: 143 — 33.

2. What number has been expanded to give;
$(3 \times 10^0) + (4 \times 10^1) + (7 \times 10^3)$?

3. Use the diagram below to find the bearing of P from Q.



4. Change 0.8333.....into a simplified common fraction.

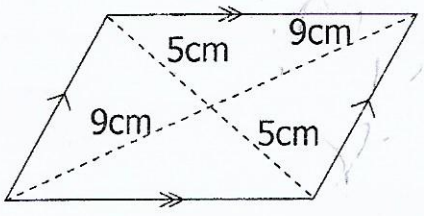
5. Simplify: $3(y - 4) - 2(y - 3)$

6. Given that 1kg of sugar costs Shs. 3600. Calculate the cost of 250gm of sugar.

7. If set K has 16 subsets, find n(K).

Turn over

. Work out the area of the rhombus below:



9. Today is Tuesday. What day of the week was it 47 days ago?

10. The ratio of boys to girls in a class of 65 pupils is 2:3 respectively. Find the number of girls in this class.

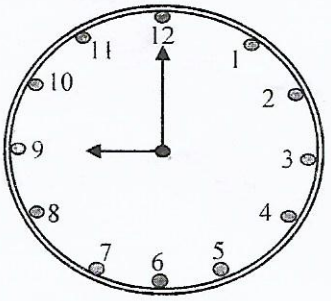
11. Round off 239.95 to the nearest tenths.

12 Work out the square root of $3\frac{1}{16}$

13. The probability that my parents will visit me is $\frac{3}{7}$. Calculate the probability that my parents will not visit me.

14. How many revolutions can a wheel of circumference 88cm make to cover a distance of 8.8km?

15. Tell the evening time shown on the clock face below.

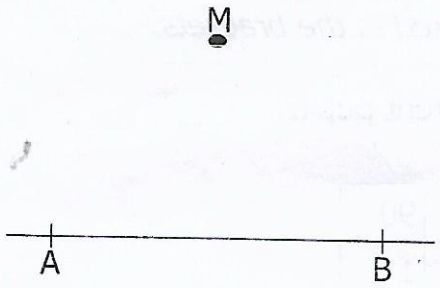


16. Express 0.028 in scientific notation.

17. Draw strips to arrange fractions below beginning with the smallest.

$\frac{4}{5}, \frac{2}{5}, \frac{3}{5}, \frac{1}{5}$

18. Using a pair of compasses, a pencil and a ruler only, construct a perpendicular line from point M to meet line AB at X.



19. Subtract: $1101_{two} - 111_{two}$

20. Given that a = b = 5 and y = 7. Find the value of $3a^2b - ay$.

SECTION B : 60 MARKS.

Answer **all** *questions in this section.*
Marks for each question are indicated in the brackets.

21. The table below shows marks scored by different pupils.

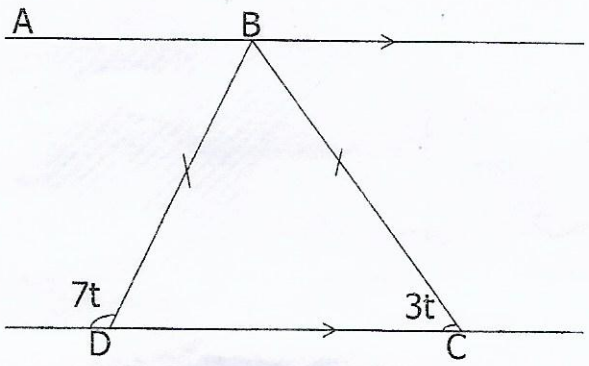
Marks	40	70	35	50	90
Number of pupils	3	2	2	2	1

(a) Find the median mark. *(2 marks)*

(b) Work out the modal mark. *(1 mark)*

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

22. Use the figure below to answer the questions that follow.

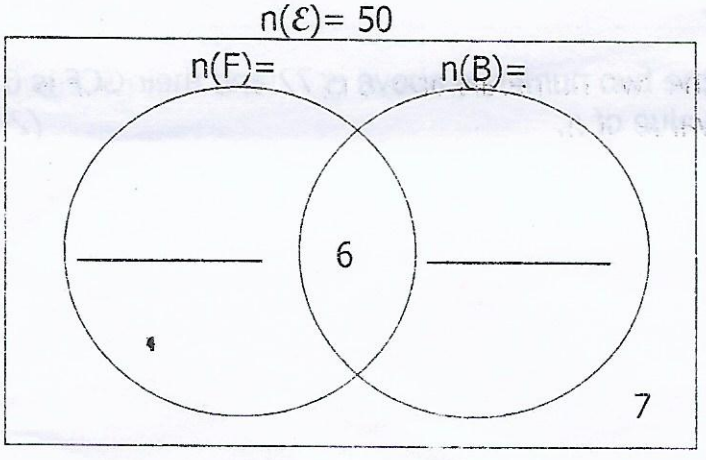


(a) Solve for the value of t in degrees. *(2 marks)*

(b) Find the size of angle marked ABC. *(2 marks)*

23. At a party attended by 50 guests, some guests ate Fish (F) and Beans (B). If 23 guests ate beans and 7 did not eat any of the dishes;

(a) Use the information given to complete the Venn diagram below. *(2 marks)*

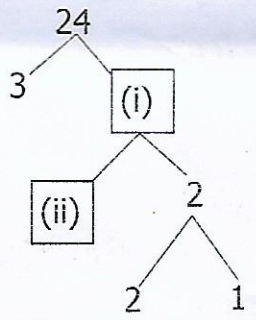


(b) How many guests ate Fish only? *(2 marks)*

(c) Find the probability of selecting a guest who ate only one type of dish. *(1 mark)*

4. A teacher wrote two numerals as n and 24;

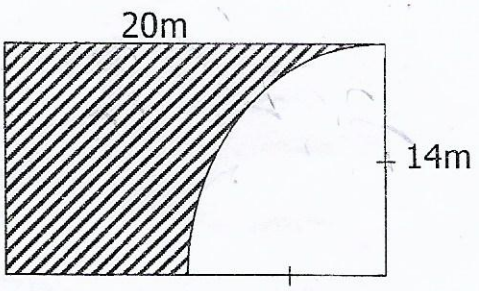
(a) Complete the prime factorisation of given numeral as below. *(2 marks)*



(b) If the LCM of the two numerals above is 72 and their GCF is 6. Work out the value of n. *(2 marks)*

25. Calculate the area of the shaded part in the figure below. (Take $\pi = \frac{22}{7}$)

(4 marks)



26. The table below shows the rates at which different currencies were sold and bought at the forex bureau.

Currency	**Buying in Ug Shs.**	**Selling in Ug Shs.**
1 US dollar ($)	3,600	3,650
1 Euro (EURO)	4,000	4,020
1 Kenya shilling (K sh)	4.0	5.0

(a) Convert Ug Shs. 723,600 to Euros. *(2 marks)*

(b) How many US dollars can be exchanged for 328,500 Kenya shillings?
(3 marks)

27. (a) Work out: $\frac{1}{2} - \frac{2}{5}$ of $\frac{3}{4}$ *(2 marks)*

(b) In a school, $\frac{5}{8}$ of the population are girls and there are 400 more girls than boys. How many pupils are in the school? *(4 marks)*

28. (a) Solve for t: $3^2 \times 3^t = 27$ *(2 marks)*

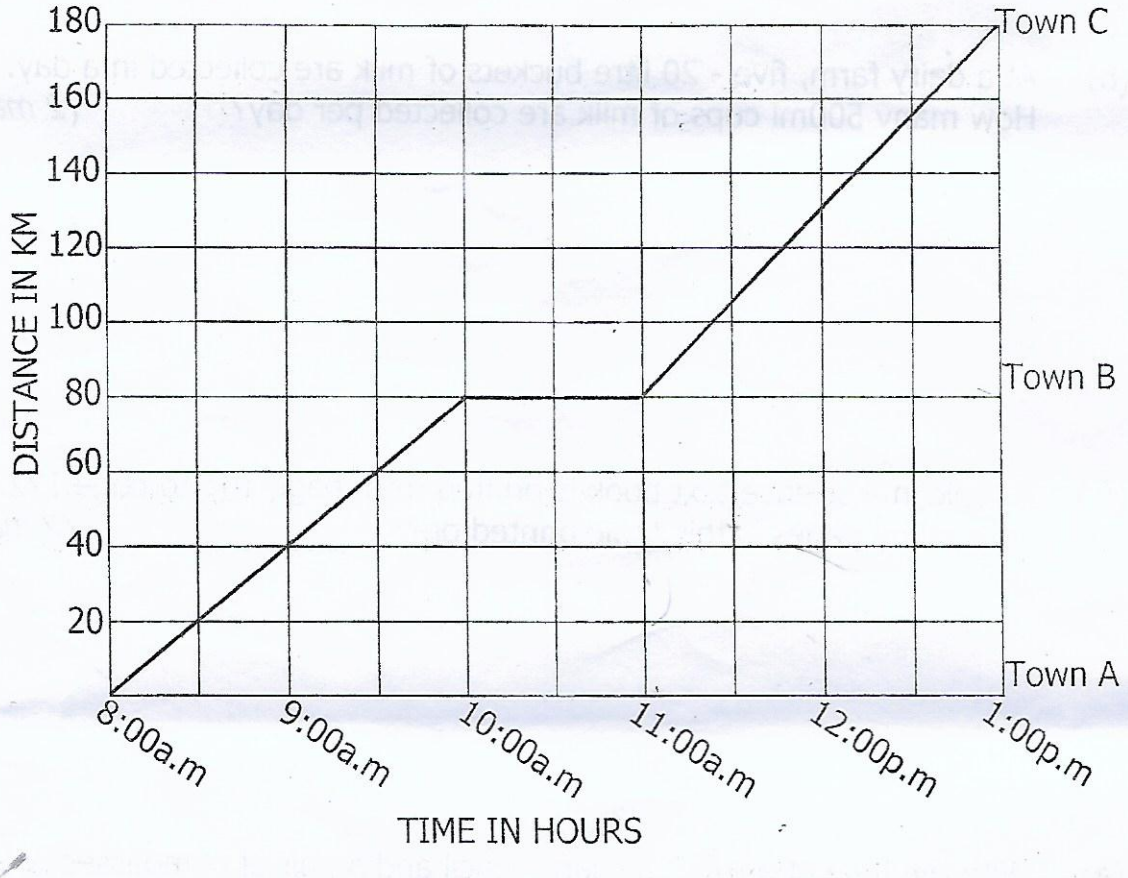
(b) At a dairy farm, five - 20 litre buckets of milk are collected in a day. How many 500ml cups of milk are collected per day? *(2 marks)*

(c) A topic in a science text book is printed from page 101 to page 172. How many pages is this topic printed on? *(2 marks)*

29. (a) With the help of a ruler, a sharp pencil and a pair of compasses only, construct a rectangle SHAP in which SH = 7.5cm and HA = 5cm *(4 marks)*

(b) Measure the diagonal PH. *(1 mark)*

30. The travel graph below shows how a bus travelled from town A via town B to town C.



(a) At what time did the bus arrive at town B? *(1 mark)*

(b) How far is town C from town B? *(1 mark)*

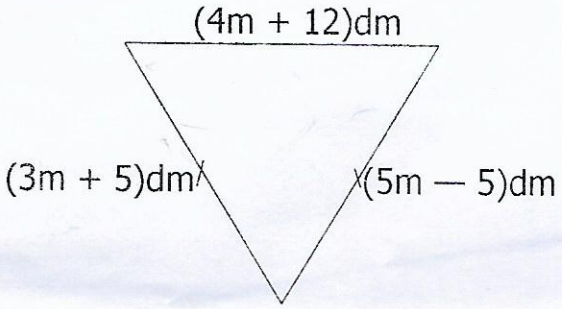
(c) Express the bus average speed for the whole journey in m/sec.

(3 marks)

31. (a) Solve and write the first three values of the inequality below;
$4p - 6 \geq 2$

(3 marks)

(b) Calculate the value of m in the triangle below. *(2 marks)*



32. A parent distributed pocket money to his children as follows;

Olivia	Shs. 12000
Juma	Shs. 15000
Annet	Shs. 28000
Sarah	Shs. 17000

Using a radius of 3.5cm, draw an accurate pie-chart to show the above information. *(6 marks)*

END