



SURE KEY EXAMINATIONS BOARD  
PRIMARY LEAVING EXAMINATION  
MARCH 2021  
MATHEMATICS

**Time Allowed: 2 hours 30 minutes**

<b>Index No.</b>	<b>Random No.</b>						<b>Personal No.</b>		

**Candidate's Name:** .....

**Candidate's Signature:** .....

**School Random No.** .....

**District ID:**.....

**Read the following instructions carefully:**

1. Do not write your **school** or **district name** anywhere on this paper.
2. 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
3. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
4. **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.
5. **No calculators** are allowed in the examination room.
6. Unnecessary **changes** in your work and 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.

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

## SECTION A: 40 MARKS

Answer **all** questions in this Section  
Questions 1 to **20** carry two marks each

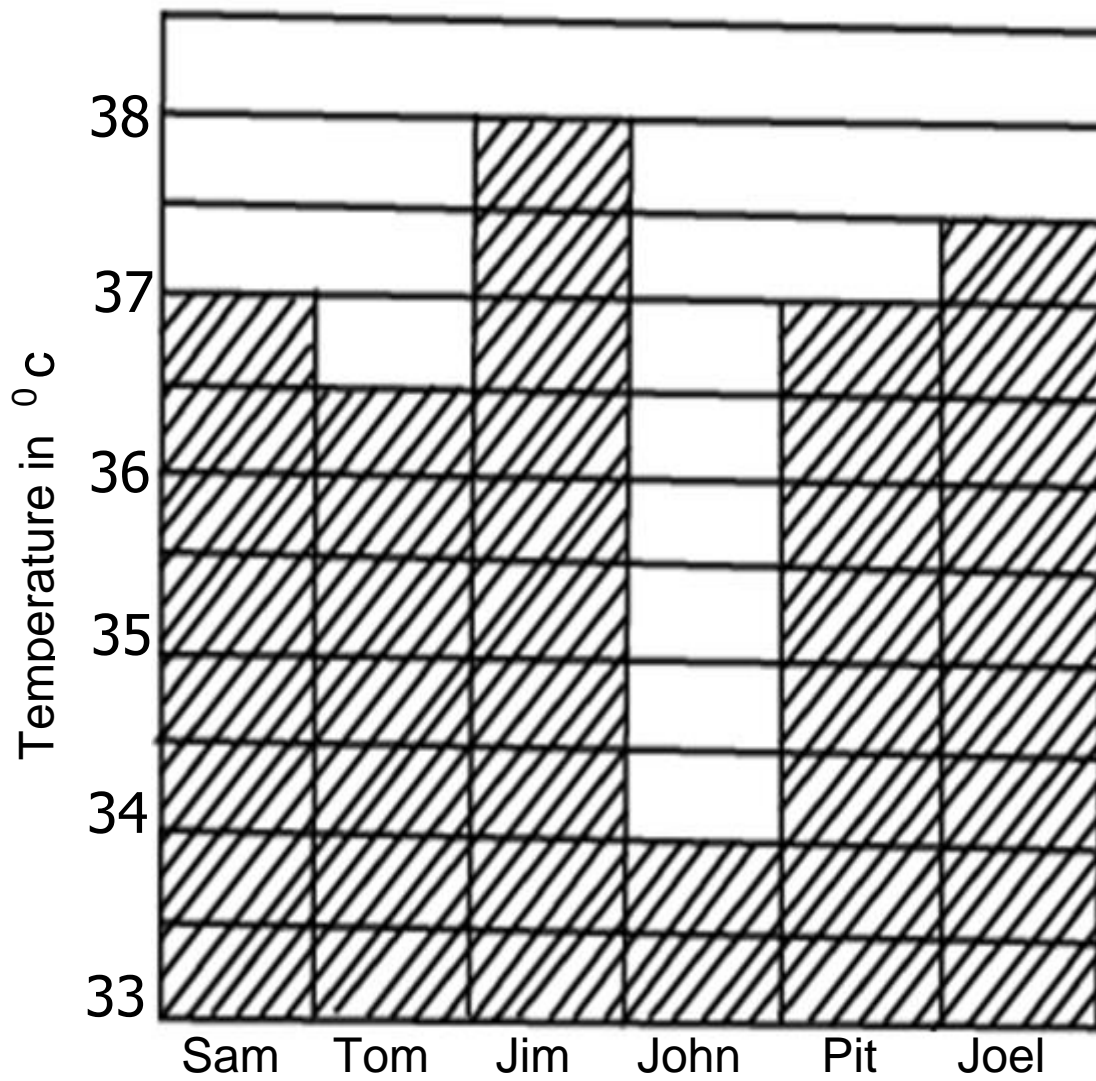
1. Multiply:  $0.4 \times 0.2$ .

2. Change  $72_{\text{ten}}$  to binary base.

3. Divide:  $\frac{2}{3} \div \frac{2}{9}$

4. Given that set  $T = \{C, O, V, I, D, 19\}$ , find the number of subsets in set T.

5. The graph below shows the body temperature of six boys taken at Pokot Primary School by the Covid 19 task force on the reporting day for school . Study it and answer the question that follows.



Work out the average body temperature of the six boys that day.

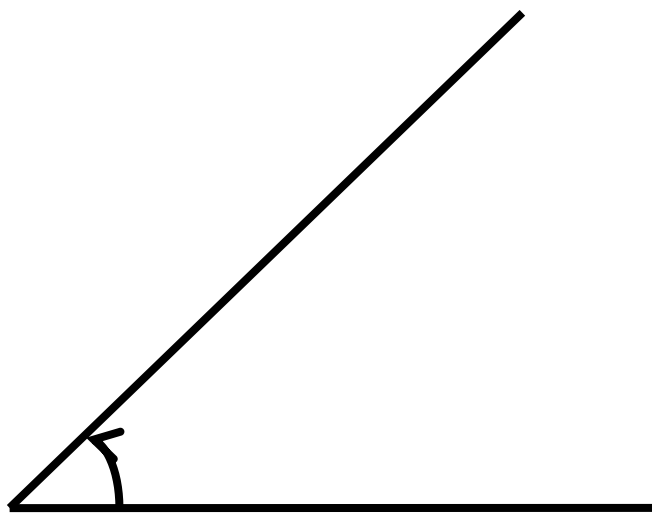
6. A man's stride is 30cm. How many strides does he have to make to cover a distance of 150 metres?

7. Find the next number in the sequence below

0, 1, 3, 6, 10, .....

8. Find the value of the exterior angle of a regular hexagon.

9. Use a protractor to measure the angle marked below,

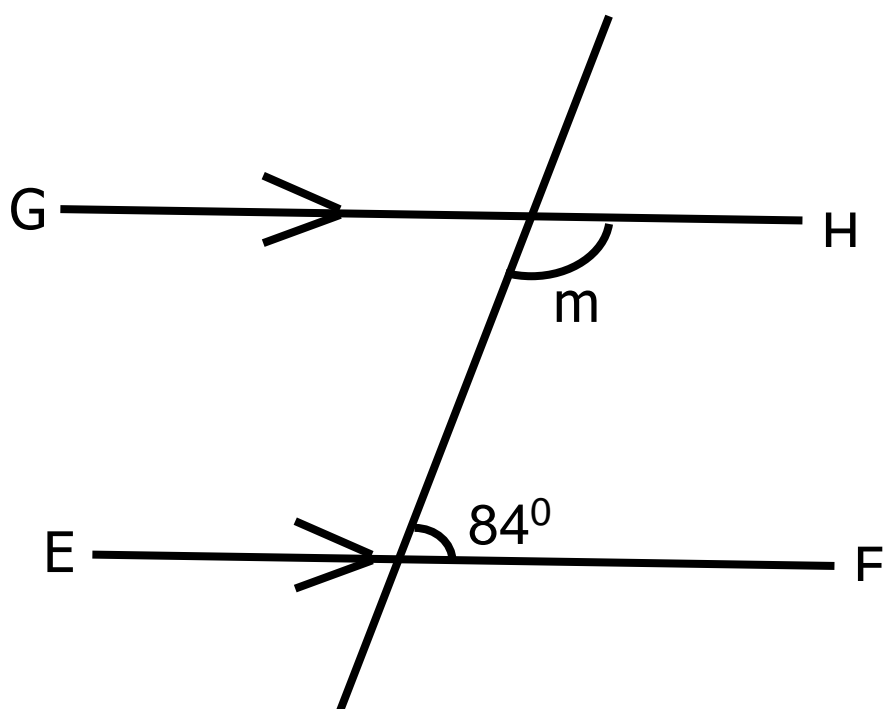


10. A thief broke into the house at four minutes to mid-night, Express this time in a 12-hour clock system.



11. The Perimeter of an equilateral triangle is 36cm. If one side is  $(x + 8)$  cm, find the value of  $x$ .
12. Solve:  $3p - 6 = 18 + p$
13. Majugo spends Shs. 60,000 on feeding his family. This is 75% of his monthly salary. How much is his salary?
14. What number has been written in standard form below?  
 $1.0032 \times 10^3$

15. In the figure below, GH is parallel to EF. Find the size of angle  $m$ .



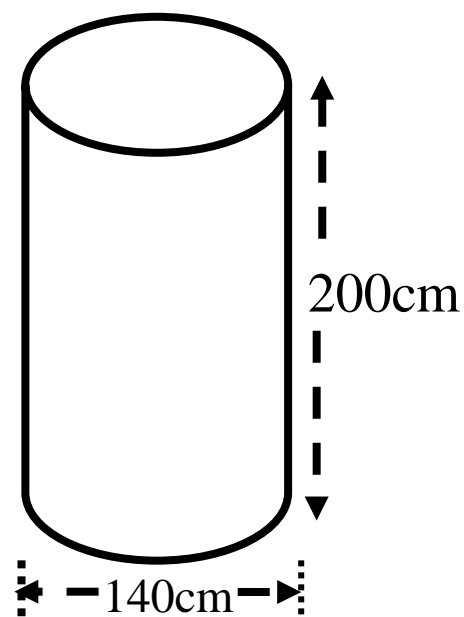
16. The average weight of 5 boys is 48kg. When a sixth boy joins them average weight becomes 45kg. What is the weight of the sixth boy?

17. Given that  $a = \frac{1}{2}$ ,  $b = \frac{1}{3}$  and  $c = \frac{1}{4}$ . Find the value of  $a + c \div b$ .

18. Two numbers, 27 and 36 have a Lowest Common Multiple(LCM) of 108. Find their GCF.

19. Find the capacity of the cylindrical tank below.

(Use  $\pi = \frac{22}{7}$ )



20. Subtract  $(2x - 4)$  from  $(5x - 4)$



**SECTION B: 60 MARKS**

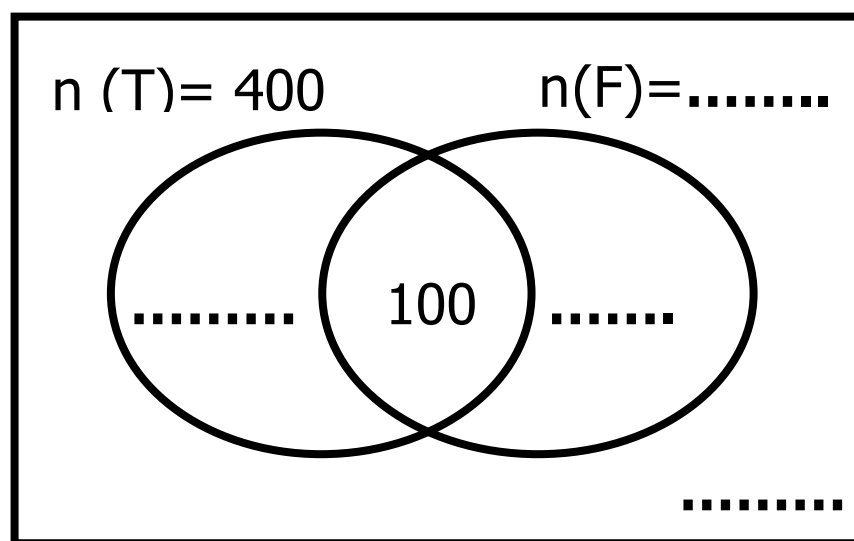
Answer **all** questions in this section

Marks for each question are indicated in brackets

21. In a village of 800 people,  $\frac{1}{2}$  of them are Traders (T),  $\frac{1}{4}$  are Farmers (F), 100 carry out both activities while the rest are neither Farmers nor Traders.

(a) Use the above information to complete the Venn diagram below.

(04 Marks)



(b) How many villagers were involved in only one activity?

(01 Mark)



22. The table below shows Sarah's shopping bill. Study it carefully and then fill the blank spaces. (04 Marks)

Item	Quality	Price	Cost
Sugar	5kg	sh.3,000 per kg	sh.....
Beans	4kg	sh.....perkg	sh 18,000
Soap	.....bars	sh 3,800 per bar	sh 7,600
Paraffin	4litres	sh 2,500 per litre	sh .....

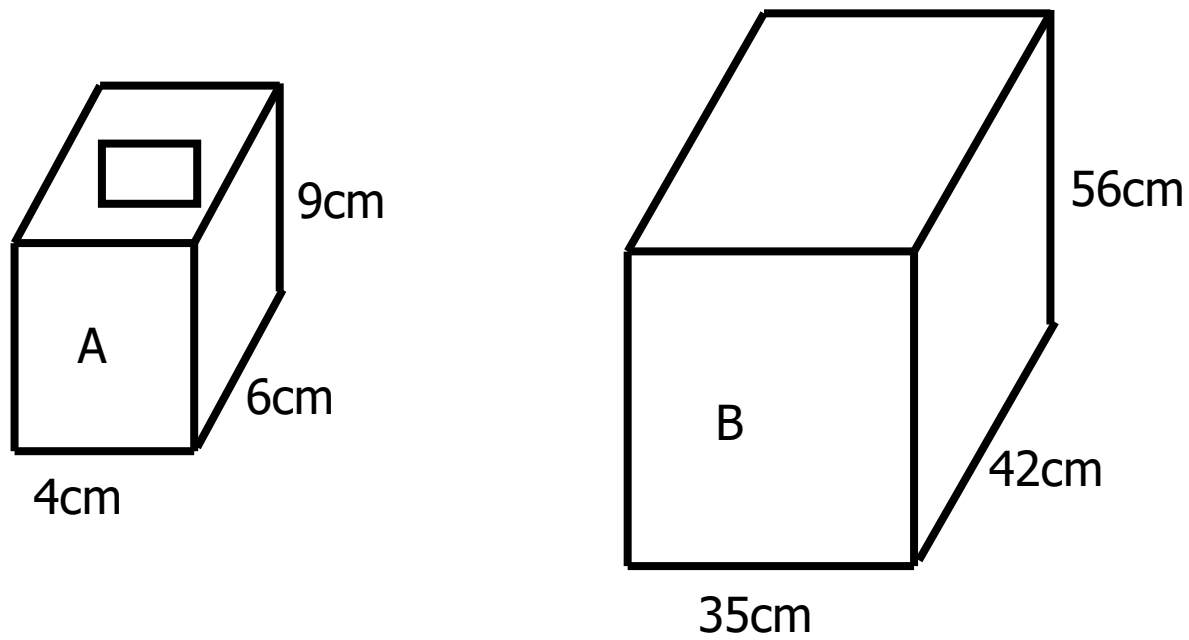


23. The current water meter reading of Mr.Mugaga is CE009827 and the initial reading was CE009727. NWSC charges sh2,800 for every unit and a VAT of 20% is levied on the bill.

(a) Calculate Mr.Mugaga's water bill. (03 Marks)

(b) If each unit of water contains 20litre jerrycans and Mugaga sells each jerrycan at sh.200, how much would he earn from the units? (02 Marks)

24. Below is a ballot box A and a big collection box B in which ballot boxes of size A from different polling stations were packed before being taken to the district tallying centre.



- (a) How many ballot boxes A were packed in collection box B?

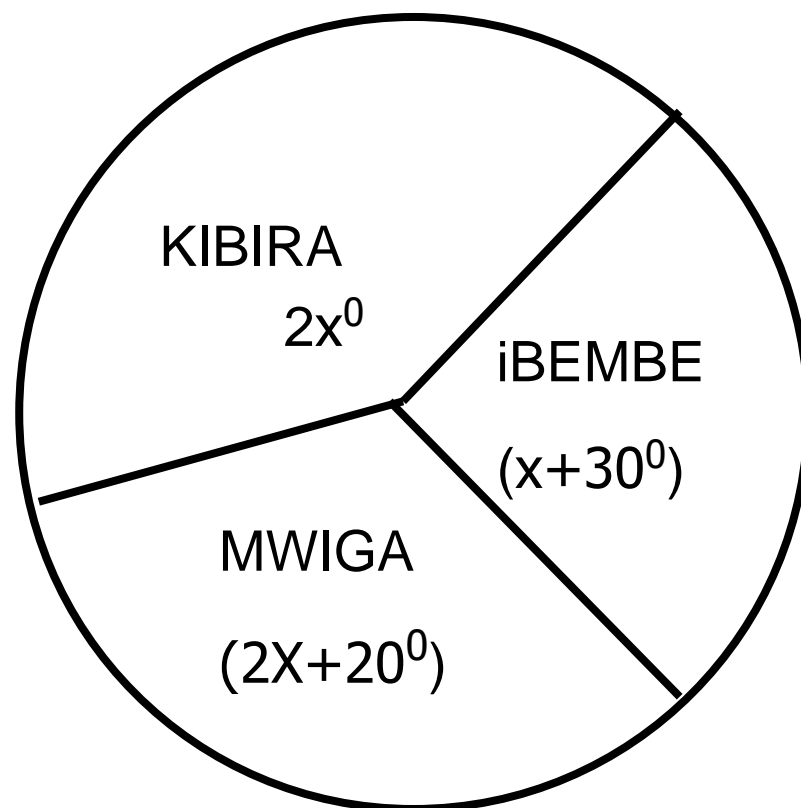
*(02 Marks)*

- (b) Calculate the space left empty in the collection box B after packing it with ballot boxes A.

*(03 Marks)*

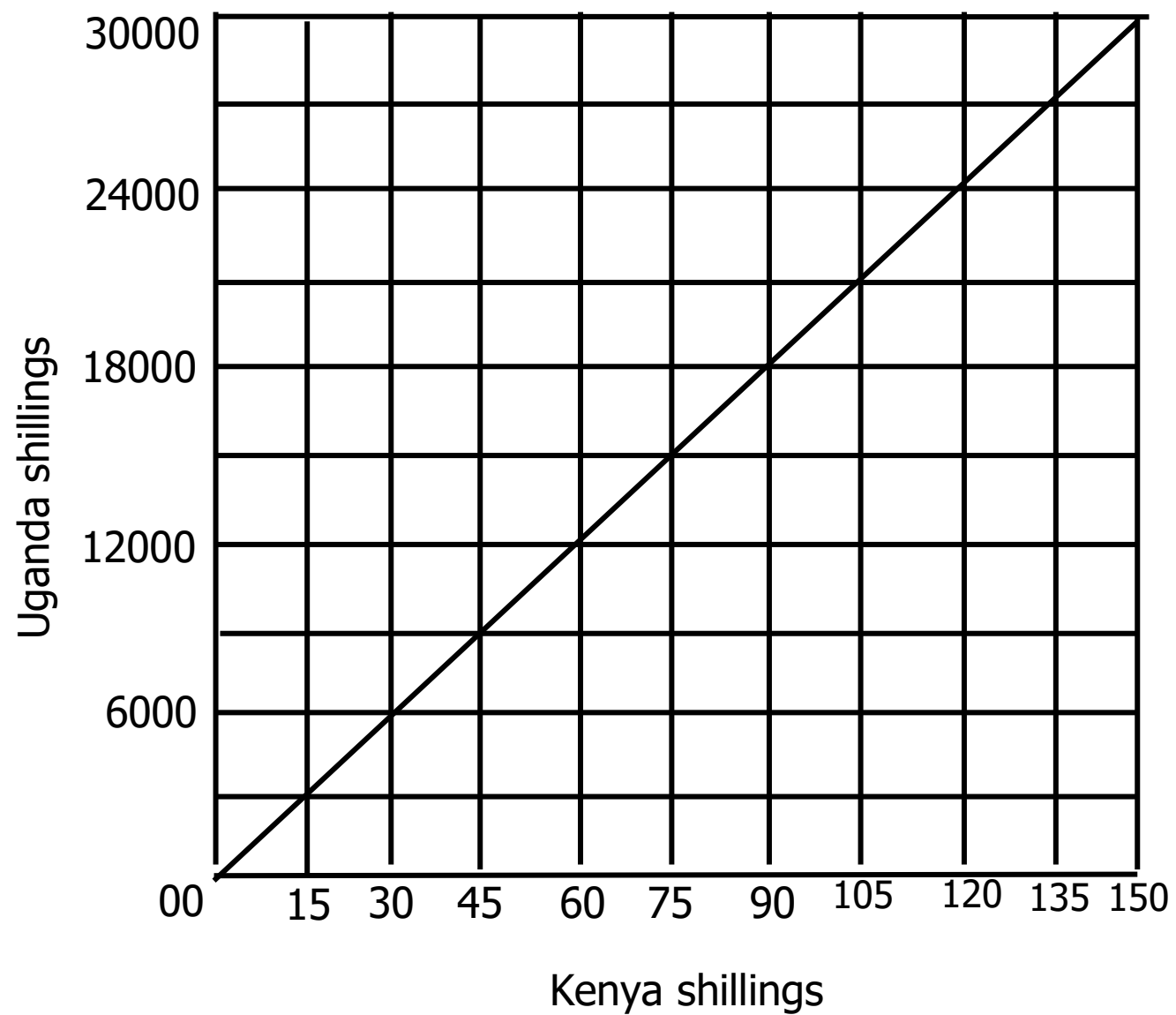


25. The Pie Chart below shows the number of school drop outs in three villages.



- (a) Given that 5520 children dropped out of school in Ibembe village, find the value of  $x$  *(02 Marks)*
- (b) Find the number of school drop outs in;
- (i) Kibira village *(03 Marks)*
- (ii) Mwiga village *(01 Marks)*

26. The graph below was used for converting Kenya shillings into Uganda shillings at Caltek Forex Bureau. Use it to answer questions that follow.



- (a) If Omoro had ksh 90, how much would he get in Uganda shillings at the Forex bureau? *(01 Mark)*
- (b) How much in Kenya shillings would you get if you had Ugsh 240,000 from the forex bureau? *(03 Marks)*



27. While testing for COVID 19 cases in Uganda on 18<sup>th</sup> November, 2020, the ratio of negative to positive cases was 3:25 respectively. 40% of the positive cases were from Elegu town while  $\frac{1}{5}$  of negative cases were from Luweero. If 60 of the remaining negative cases were from Kampala,

(a) How many positive and negative cases each were tested in Uganda that day? *(05 Marks)*

(b) Find the number of positive cases registered in Elegu town that day *(02 Marks)*

28. Peter packs milk in packets of 750ml each and then delivers 285 litres to the nearby dairy for sale.

(a) How many packets of milk does Peter deliver to the dairy?

*(02 marks)*

(b) If Peter rides on a motorcycle while taking the milk to dairy travelling at a speed of 27km/hr for two hours, at what speed must he ride to come back to cover the same distance in  $1\frac{1}{2}$  hours?

*(03 marks)*



29. Below is a rectangular metallic sheet. Calculate its area.

$(3p+1)\text{cm}$

*(04 marks)*



$(3p-1)\text{cm}$

$(p+9)\text{cm}$

30. A presidential motorcade going for elections drove from State House (ST) for 65km on a bearing  $045^{\circ}$  to the Electoral Commission (EC) building from where it turned South East to the Polling Station (PS) for 70km.

(a) Using a scale of 1cm to represent 10km, show the three places on an accurate diagram. *(04 Marks)*

(b) Find the shortest distance between the polling station and the State House in Km. *(02 Marks)*



31. Samson had 4y pancakes which was twice as much as Asumputa's. Gloria had four pancakes more than Samson while Maria had half as many pancakes as Gloria. If the four shared 54 pancakes,  
How many pancakes did each get? (05 Marks)

32. (a) Add:  $3 + 4 = \dots\dots\dots$  (Mod 9) ( 01 Mark)

(b) Kirabo sat guests in groups of nines but seven got no seats she tried seating them in groups of eights but four didn't get seats and she finally sat them in groups of threes and one visitor got no seat. How many guests attended the party?  
(03 Marks)

