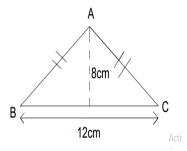
1 Divide:  $\frac{2}{3} \div \frac{1}{3}$ 

2 Round off 3.49 to one decimal place

Find the value of X in  $23_X = 1101_{two}$ 

- 4 Monitor publication's casual labour deliveries newspaper from door to door at a rate of shs. 5,000/= for every 1,000 copies delivered. How much is earned by someone who delivers 1,500 copies?
- 5 The figure below is an isosceles triangle. Find the perimeter around it.



At wandegeya market tomatoes are sold in heaps of 8 at shs.1,000/=. If peter buys 32 tomatoes, how much does he pay?

Figure 7 Evaluate  $(4.3 \times 10^4) + (2.7 \times 10^{4)}$  using distributive property

8 Add: 3.4 + 0.51

9 Simplify:  $\frac{2^2 \times 2^5}{2^3}$ 

Write 79000 in scientific form

Work out:

Weeks days
9 4
- 3 6

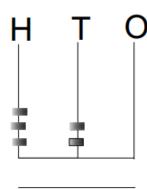
12 Change 120 minutes into hours

13 Subtract:  $101_{two} - 11_{two}$ 

Find the area of the circular plate whose diameter is  $3\frac{1}{2}$  cm. (Take  $\pi = \frac{22}{7}$ )

Express 90 km/hr to m/s

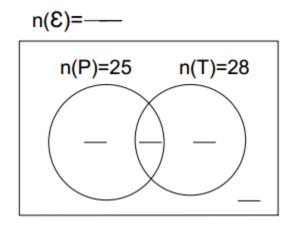
- Find the value of 3 in 19.38
- Write the number shown on the abacus in words



- A soda company makes 1440 bottles of soda daily and packs 6 bottles in a crate. How many crates does the factory make daily?
- 19 Express MCiX in Hindu Arabic numerals
- Find the product of the value of 3 and the place value of 4 in the number: 7368.49

#### **SETION B**

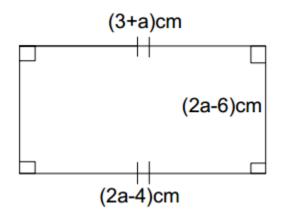
- 21 a) Given that a = 4,  $b = ^{-}6$  and c = 2, find the value of (a b)c (3 marks)
  - b) solve: 2n 5 = 11 (2 marks)
- 22 a) Express 12:30 p.m in 24 hour clock. (2 marks)
  - b) A baby slept from 11:20a.m upto 1:40p.m. For how long did he sleep? (2 marks)
- 23 Given that n(P) = 25, n(T) = 28 and n(PnT) = 10.
  - a) Use the information to complete the venn diagram below. (2 marks =  $\frac{1}{2}$  each)



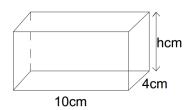
b) Find the value of:

- i) n(PUT)
- (2 marks)
- ii) Find n(PnT)<sup>1</sup>
- (2 marks)
- Bbino deposited shs. 72,000/= in a b ank which offers interest rate of 10% per annum for 2 years.
  - a) Find the simple interest he got after 2 years
- (3 marks)
- b) Work out the total amount in shillings that he had after the 2 years. (2 marks)
- 25 a) remove the brackets and simplify 2(y + 3) + 3(y + 2) (2 marks)
  - b) Factorise completely: 3ab + 9b

- (2 marks)
- study the figure below carefully and answer the questions that follow:

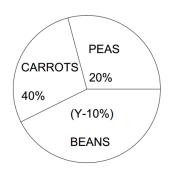


- a) Find the value of a
- (2 marks)
- b) Calculate the distance around the figure
- (2 marks)
- c) Work out the area of the figure
- (2 marks)
- a) Using a ruler, a pencil, and a pair of compasses only, construct a regular triangle ABC in which AB = BC = CA = 6cm (3 marks)
  - b) Accurately by help of pair compasses, show the lines of symmetry. (2 marks)
- The volume of the tank below is 120 cm<sup>3</sup>.
  - a) Find the height in centimetres



b) calculate the T.S.A of the tank

29 Study the pie-chart and answer the questions that follow



a) Find the value of Y

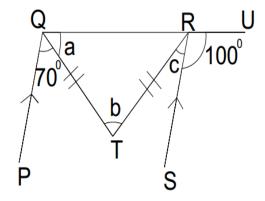
(2 marks)

b) If he uses shs. 12,000/= to buy peas, how much did the trader use on all items? (3 marks)

30 Study the table below carefully and answer the questions that follow

Marks	40	50	55	60	70
	2	1	2	4	1
No. of pupils					

- a) Find the mean mark (3 marks)
- b) Calculate the range of the marks (1 mark)
- c) Find the modal frequency (1 mark)
- In the figure below, PQ is Parallel to RS, TQ = TR, angle  $PQT = 70^{\circ}$  and angle SRU =  $100^{\circ}$  . find the value of angles a, b and c



In a P.7 class each member plays one game. The table below shows the games played and numbers of members who play them.

Games	No. of Members
Football	40
Volley ball	15
Netball	20
Basket ball	30
Tennis	15

Draw a pie chart of radius 4cm to represent the above information.

THE END

Tekart Revision series 5

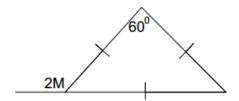
1. Work out:  $55 \div 5$ 

2. Write two thousand eighty -four

3. Write CV in Hindu Arabic numerals

4. Simplify: -5 + +5

5. In the triangle below, find the value of M in degrees



6. Given set  $M = \{\text{cat, dog, cock, hen}\}\$ and set  $R = \{\text{sheep, cow, cat, duck}\}\$ . Find n(M - R)

7. Given the digits below. Find the meridian: 2, 4, 7, 8, 3

8. Mark has bank notes numbered from AC7059620 to AC7059719. If each note is shs. 2,000/=. How much money has Mark banked.

9. Which digit is in the place value of thousands in the figure: 2987

10. Simplify: 5y + 5y

11. Morris has five poles to be used to make a round (circular) shade. What is the total distance from the first pole to the last one if the distance between any two poles is 2m?

# **SECTION B**

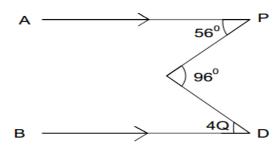
12. a) write five tenths in figures

(2 marks)

b) Write two thousand eleven and eleven hundredths in figures. (2 marks)

c) Find the unknown base given that  $24_n = 22_{\text{six}}$ 

13. In the diagram below, AP is a parallel to BD. Study it carefully and answer the questions that follow:



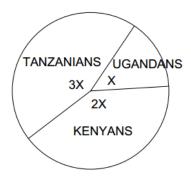
- a) Find the value of Q in degrees.
- (3 marks)
- b) If 3Z and 111<sup>0</sup> are alternate angles. Find Z in degrees
- (2 marks)

- 14. Work out the following:
  - a) If the average of x, 3x, 7x, 4x and 0 is 6. Find x. (2 marks)
  - b) The average of 3, 0.7 and X is 4. What is the value of X
- (2 marks)

- c) Find the mean between both values of X above.
- (1 mark)

15. a) Solve: 4(P + 2) + 3(P - 1) = 12

- (3 marks)
- b) Find the solution set to n 6 > 1 if n is an even number less than 14 (3 marks)
- 16. During last year's CECAFA quarter finals between Uganda and Tanzania. There were 72,000 spectators as shown on the pie- chart below. Use it to answer the questions that follow.



a) Find the value of X in degrees.

(3 marks)

b) How many Tanzanian spectators were there?

- (2 marks)
- c) Write the Kenyan spectators as a fraction in its lowest form.
- (2 marks)

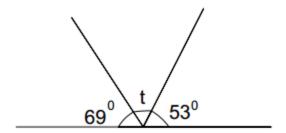
17. a) Calculate:  $3 + 4 \times 2$ 

- (2 marks)
- b) There are 359 books packed on each shelf. How many books can be packed on 511

shelves? (3 marks)

THE END.

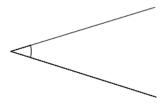
- 1. Add: 365 + 35
- 2. John walked 4.6km from his home to his daughter's house. Express this distance in metres.
- 3. Find the size of angle marked t in the figure below



- 4. Solve: 4q 8 = 16
- 5. Subtract:  $\frac{1}{3} \frac{1}{6}$
- 6. Change  $5_{ten}$  to binary
- 7. What is the complement of  $70^{\circ}$ ?
- 8. Multiply: 106 x 4
- 9. In a class of 60 pupils, 12 are girls. Express the number of girls as a percentage of the whole class.
- 10. If set  $P = \{1, 2, 3, 4\}$  and  $PUQ = \{1, 2, 3, 4, 5, 6\}$ . Find the number of members in set Q
- 11. Sticks, 6cm each were used to make a cube. What was the total length of the cube?
- 12. Find the Greatest Common Factor of 8 and 20?
- 13. Allan bought 4 exercise books at shs.800.

  How much would he pay for 8 similar exercise books?
- 14. Write 24,086 in words.
- 15. The average age of girls is 12 years. If one of them is 10 years old, what is the average age of the other two two girls?
- 16. A dice whose faces are numbered 1 to 6 is rolled once by Ronald. What is the probability that an even number will show up?
- 17. Express  $\frac{3}{5}$  as a decimal fraction.
- 18. Opondo buys a bicycle at shs. 95,000 then sells it at shs. 109,000. What is his percentage profit?

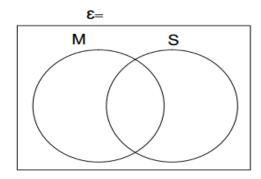
19. Using a pair of compasses and a ruler, bisect the angle given below.



20. Arthur ran 100 metres in 10 seconds. Express his speed in kilometres per hour.

## **SECTION B**

- 21. In a class of 50 boys, 40 like Mathematics (M) and 25 like Science (S). some boys (x) like both subjects and 2 do not like any of the two subjects.
  - a) Show this information in a venn diagram below.



- b) How many boys like both Mathematics and Science?
- c) How many boys like Mathematics only?
- 22. A parent gave exercise books to two sons and a daughter; James, Peter and Jane in the ratio 3:5:4 respectively. If Jane got 16 exercise books, how many exercise books did the parent give altogether?
- 23. The table below shows marks scored by the pupils in Mathematics test. Use it to answer the questions that follow.

Marks scored	70	40	30	50
No. of pupils	3	4	2	1

- a) How many pupils did the test?
- b) Find the modal mark.
- c) Find the mean mark.

- 24. In Gramma Primary School,  $\frac{3}{4}$  of the pupils who sat for the End of term examinations passed.
  - a) If those who failed were 30, find the number of pupils who passed.
  - b) What percentage of the pupils failed the examination?

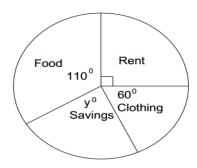
25. a) Simplify: 
$$\frac{0.48 \times 0.2}{0.16}$$

b) If 
$$a = -3$$
,  $b = 6$  and  $c = -2$ . Find the value of  $\frac{b(a+c)}{c}$ 

- 26. a) Using a ruler, pencil and a pair of compasses only, construct a triangle XYZ such that length XY = 6cm, angle  $ZXY = 60^0$  and  $ZYX = 45^0$ .
  - b) Measure < Z
- 27. Aisha went to the market and bought the following items shown in the table below.
  - a) Complete the table

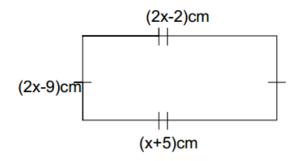
Item	Quantity	Price	Amount
Eggs	15	Shs. 300@	Shs
Meat	kgs	Shs.6000 per kg	Shs. 15,000
Cooking oil	$\frac{1}{2}$ litres	Shs Per litre	Shs.2000
Sugar	$1\frac{1}{2}$ kg	Shs. 3000	Shs
		Total Expenditure	Shs

- b) Aisha went to the market with shs. 30,000, how much did she remain with?
- 28. The pie-chart below shows how Kabata spends his monthly salary. Study it carefully and answer the questions that follow.

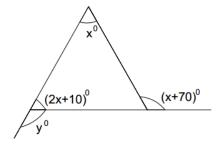


- a) Find the value of y.
- b) If he spends sh. 36,000 on clothing, how much does he earn per month?
- c) How much more does he spend on food than he saves?
- 29. a) Solve: 5t 2(t + 1) = 1
  - b) Solve: 3 + 4m > 12 + 3m
- 30. what is the place value of digit 4 in the number 340017?
  - b) Simplify:

31. The figure below is a rectangle. Use the information given to answer the questions that follow.



- a) Find the value of x.
- b) Work out the perimeter of the rectangle
- c) Calculate its area
- 32. Use the figure below to answer the questions.



- a) Find the value of x.
- b) Find <y.

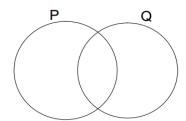
1. Subtract 2341 – 231

2. Solve for k in: 2k + 4 = 10

3. Write 2,424 in words

4. Simplify -6 + 8

5. Shade the complement of p on the venn diagram below



6. A rectangle measures 4m by 3m. what area does it cover?

7. Increase 80 pens in the ratio of 3:2

8. What name is given to a polygon with six sides?

9. Find the next number in the number pattern below

10. Arsenal and Manchester united match started at 4:00p.m lasted for 1 hour and 30 minutes. At what time did it end?

11. Find the LCM of 12 and 32

12. Work out the value of 6 in the number 3624

13. Use a ruler and a protractor only to draw an angle of  $65^{\circ}$ 

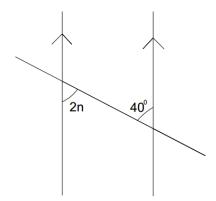
14. Write  $214_{\text{five}}$  in the expanded notation

15. Add

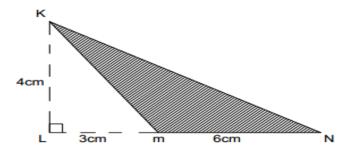
16. The area of a circle is  $154 \text{cm}^2$ . Calculate the radius  $(\pi = \frac{22}{7})$ 

17. Express 29 in Roman numerals

18. Find the value of n in the diagram.



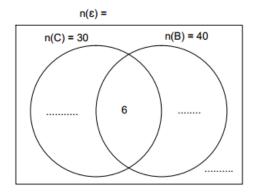
- 19. If a dice is tossed once, what is the probability of obtaining prime number?
- 20. Study the figure below and find area of the shaded part.



#### **SECTION B**

- 21. During Samuel house party (winner 2012 sport competition), 84 guests attended. Of these, 30 guests enjoyed chicken (C), 40 guests enjoyed beef (B), 20 guests enjoyed neither of the two and 6 guests enjoyed both.
  - a) complete the venn diagram below.

(3 marks)



b) How many guests enjoyed only one type of sauce?

(2 marks)

c) Find the probability of picking a guest who enjoyed none of the two sauces? (2 marks)

- 22. a) Use the digits 4, 3, 6 to form the biggest and the smallest three digit numerals that can be formed. (2 marks)
  - b) Workout the sum of the biggest and the smallest three digit numerals that can be formed. (2 marks)
- 23. a) Work out: 4678 249

(2 marks)

b) Solve:  $\frac{0.03 \times 0.6}{0.2}$ 

- (2 marks)
- 24. The sum of three consecutive even numbers is 42.
  - a) Find the numbers.

(4 marks)

- b) What is the difference between the smallest and the biggest even number. (2 marks)
- 25. A parent bought 60 mangoes. He gave them to his children: Abel, Aber, Abed to share in the ratio 2:3:5 respectively.
  - a) How many mangoes did each get?

(3 marks)

b) How many more mangoes did Abed get than Abel?

(2 marks)

26. The table below shows marks scored by different pupils in a monthly test.

Marks	50	40	70	60
No. of pupils	2	1	2	5

a) How many pupils did the test?

(2 marks)

b) What was the modal mark?

(1 mark)

c) Calculate the nean score

(2 marks)

- 27. Akello's father bought the following for birth day party.
  - 2 bars of soap at shs. 3,000 a bar

 $3\frac{1}{2}$  kg of meat at shs,8,000 per kg

- 4 apples at shs. 4000
- 3 sackets of Omo at shs.500 each sacket
- a) How much did her father spend altogether?

(4 marks)

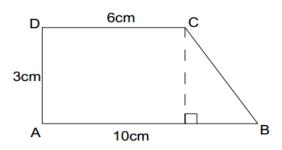
b) If he went with a fifty thousand shilling note, how much money was his balance?

(2 marks)

28. Below is a table of telephone charges for the various companies. The charges per minute for local and international calls

Company	Loacal calls per minute	International calls per
		minute
CELTEL	Sh.320	Sh.920
MTN	Sh.380	Sh.950
UTL	Sh.220	Sh.870

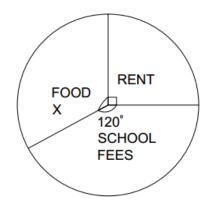
- a) Bugga made 4 local calls for 6 minutes per call and made 3 international calls to London for 4 minutes per call using CELTEL. How much did he pay? (2 marks)
- b) Azande made 5 local calls using UTL for 8 minutes per call and made 4 international calls to Dubai for 6 minutes per call. How much did she pay? (2 marks)
- c) Musa made 7 local calls using MTN for 3 minutes per call and made 8 international calls to New York for 10 minutes per call. How much did he spend?
- 29. The diagram ABCD is a trapezium.



- a) Find the length BC
- (2 marks)
- b) Work out the perimeter of ABCD
- (3 marks)
- 30. Using a ruler, pencil and a pair of compasses only.
  - a) construct a triangle XYZ such that XY = 6cm,  $< YXZ = 60^{0}$  and XZ = 5cm. (3 marks)
  - b) Measure length XZ.

(1 mark)

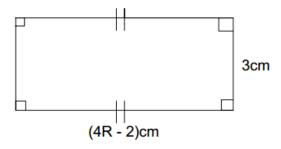
31. The pie- chart below shows how Mr.Mugisha spends his salary of sh.720,000. Use it to answer the questions that follow.



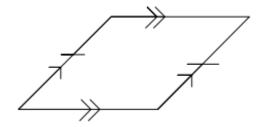
- a) Find the value of x
- (3 marks)
- b) How much money was spent on Rent? (2 marks)
- 32. a) In Mukono Parent School, there are 2 cupboards, if each cupboard has 10 shelves and each shelf having 10 books. How many books are there altogether? (4 marks)
  - b) A school bursar took bank notes numbered from AP1005103 to AP1005202 to Baroda Bank. How many notes altogether were taken? (2 marks)

THE END.

- 1. Use long division to divide 48 by 8
- 2. What is the expanded figure below  $(4 \times 10^{0}) + (3 \times 10^{2}) + (5 \times 10^{-1}) + (6 \times 10^{1})$
- 3. Find the value of X in  $201_x = 113_{five}$
- 4. Dunica's car covers 5 km on 2 litres of petrol. How far does it go on 24 litres of petrol?
- 5. Given that  $\varepsilon = \{0, 1, 2, 3, 4, 5, 6, 7, 8\}$ ,  $A = \{0, 2, 3, 5, 6\}$  and  $B = \{0, 7, 2, 3, 4\}$ . Find  $n(A \cap B)^{l}$
- 6. Using the dial method, work out  $4 5 = X \pmod{4}$
- 7. Subtract the value of x from the value of Y in the sequence below: 1, 4, 9, 16, x, 36, Y, 64...
- 8. Muchopa saves 20% of his monthly salary every month and this amounts to shs.40,000/=. Find his monthly salary.
- 9. Simplify:  $4a^3 \div 2a^5$
- 10. The geometric figure below has an area of 30cm<sup>2</sup>. Find the value of R



- 11. What is 30 kilometres per hour in metres per second?
- 12. Work out  $(8 \times 14) + (8 \times 6)$  using distributive property
- 13. A square shaped hall has an area of 324m<sup>2</sup>. Find the length of the side.
- 14. Three quraters of the people of Adepoyo village grow cassava as their staple food. If 108 people don't grow cassava, how many people are in that village?
- 15. Show the lines of symmetry on the figure below



16. Add 0.042 to 43.913 and round off your answer to one place of a decimal.

- 17. Remove the brackets and simplify: 3(2x y) 2(x + y)
- 18. Express 40052 in standard form
- 19. Show 1 < X < 5 on a number line
- 20. In the space provided below, construct an angle of  $60^0$  using a pair of compasses, a ruler and a pencil only. Bisect this angle.

# **SECTION B**

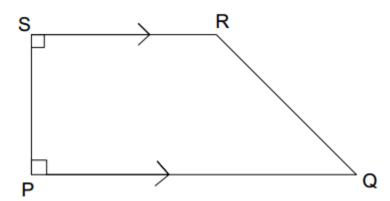
21. a) Work out:  $\frac{1.26}{0.09 \times 0.28}$ 

(2 marks)

b) Work out:  $\frac{2}{3} \times \frac{2}{7}$ 

- (2 marks)
- c) 15 bullets can complete laying concrete slab on the floor of a shopping mall in 30 days. How long will it take if the builders are reduced by six? (2 marks)
- 22. Musiimenta moved for a journey on a motorcycle. She began the journey at 8:00am moving at an average speed of 40km/hr for  $2\frac{1}{2}$  hours and then rested for  $\frac{1}{2}$  an hour. She again covered the rest of the journey in 2 hours at 60km/hr.
  - a) How long did the journey take?

- (2 marks)
- b) Calculate the average speed of the whole journey.
- (2 marks)
- 23. Below is a geometrical figure PQRS where SR = 15cm, PQ = 21cm and the area of the figure is 144cm<sup>2</sup>.



a) Work out the length of PS.

(2 marks)

b) Find the perimeter of the figure

(2 marks)

24.	Okot is 20 years older than his son now. In ten year	s time, he will be twice	e as old as his
	son.		
	a) How old is each of them now?	(2 marks)	
	b) What will be the total age of the son and the father	er in 10 years time?	(2 marks)
25.	Zam Zam Islamic P/s holiday timetable starts at 8:4	5am and ends at 12:30	pm. There are
	five equal sessions of Maths, SST, English, CAPE a	and Science respective	ly.
	a) How long is each session?	(2 mar	ks)
	b) When does CAPE session begin and end?	(2 mar	ks)
	c) 6 bags of beans weigh 720kg. how many sacks of	f beans would weigh 1	.2 tonnes?
	(2 marks)		
26.	In a party of 43 people, they all took soda n(S), 11 p	people took soda only,	17 people took
	water $n(W)$ , 27 people took Beer $n(B)$ and $X$ took a	ll the three drinks.	
	a) Represent the above information using a venn dia	agram in the space belo	ow. (2
	marks)		
	b) Find the number of people who took all the three	drinks.	(2 marks)
	c) How many people took only two drinks?		(2 marks)
27.	Mrs. Mutesasira went to the supermarket and bough	nt the following items:	
	$1\frac{1}{2}$ kg of maize flour at shs. 2,000/= per kg.		
	3 kg of soya flour at shs.3,000/= per kg.		
	$1\frac{1}{2}$ kg sugar at shs. 2,800/= per kg		
	$2\frac{1}{2}$ kg of salt at shs. 1,000/= per kilo		
	2 bunches of matooke at shs. 40,000/=		

If she was offered a discount of 20% and remained with shs.3,250/=

a) What was her expenditure on all the items?

(4 marks)

b) How much was her discount?

(2 marks)

c) Work out her initial amount.

- (2 marks)
- 28. At her building site, Zubeda mixed sand, cement and basalts using a wheelbarrow in the ratio of 3:2:5 respectively.
  - a) What percentage of the mixture is for cement?

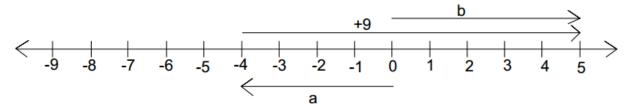
- (2 marks)
- b) If her builders use 80 wheelbarrows of cement a day, how many wheelbarrows do they use for sand? (2 marks)
- 29. a) With the help of a ruler, pencil and pair of compasses only, construct a parallelogramABCD with AB parallel to CD. AB = 6cm, BC = 4cm and angle ABC = 45<sup>0</sup>. (3 marks)
  - b) Measure i) Diagonal BD

(1 mark)

ii) Angle BAD

- (1 mark)
- c) Find the perimeter of the above parallelogram.
- (2 marks)
- 30. a) If 40% of Muboki's salary is equal to 25% of Dube's income and Muboki earns shs.
  - 400,000/= per month. Calculate the income of Dube.

- (2 marks)
- b) In what time will shs. 20,000/= yield an interest of shs.3,000 at an interest rate of 10%. (2 marks)
- 31. Study the diagram given below and answer the questions that follow:



a) Write the values of:

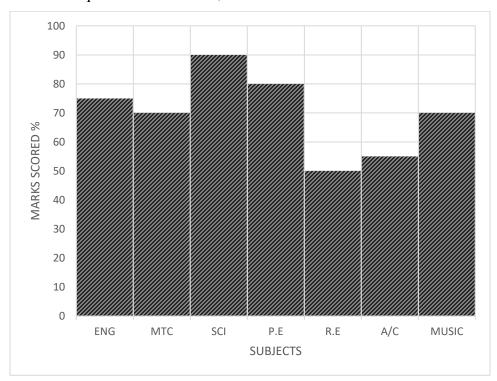
a.....

b.....

(1 mark each)

- b) What is the mathematical statement for the given diagram
- (1 mark)

32. The graph below shows the number of marks obtained by a pupil in a P.7 class. Use it to answer the questions that follow;



- a) In which subject did she score the lowest mark? (1 mark)
- b) What is the her modal score in all the subjects? (1 mark)
- c) Find her range mark. (1 mark)
- d) Calculate her mean score in all the subjects. (2 marks)

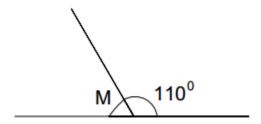
THE END.

1. Work out: 31 + 3.4

2. Divide:  $5 \div 0.5$ 

3. Prime factorise 180 using a factor tree

4. Find the size of the angle marked M



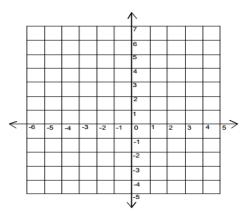
5. Express CXCIV in Hindu Arabic numerals

6. Divide:  $1\frac{3}{5}$  by  $\frac{2}{3}$ 

7. Solve 2p - 8 = 16

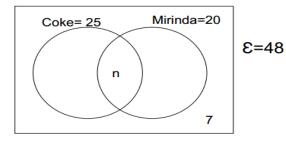
8. Arrange the following in ascending order:  $\frac{2}{3}$ ,  $\frac{1}{2}$ ,  $\frac{5}{6}$ ,  $\frac{3}{4}$ 

9. Using the grid below, plot the co-ordinates N(-2, 3)

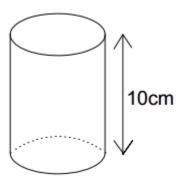


10. Find 40% of 150

11. Study the venn diagram below and find the value of n.



12. The cylinder below has a base area of 154cm<sup>2</sup>. Calculate its volume.



13. Write down the next number in the sequence

- 14. After covering 30km, Auma still has to cover  $\frac{2}{3}$  of the journey. How long was the journey?
- 15. Work out:  $x 2 = 2 \pmod{3}$
- 16. Using a pair of compasses, a ruler and a pencil only, construct an angle of  $120^{\circ}$ .
- 17. Find the median of the following numbers:

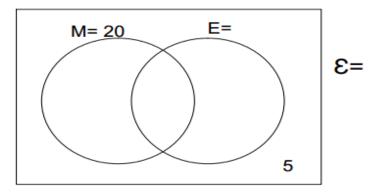
- 18. Add: 4.05 + 11.4 + 2.26
- 19. Find the next number in the sequence:

$$0, 1, 2, 3, 5, 7, 9, \dots$$

20. An aeroplane took 15 minutes from Port A to Port B, a distance of 40km. calculate its speed in km/hr.

# **SECTION B**

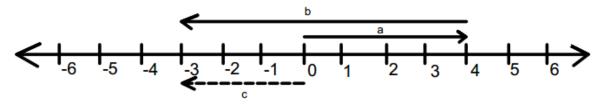
- 21. In a class of 40 pupils, 20 pupils like Maths (M) only x pupils like English (E) only and 5 pupils do not like any of the subjects.
  - a) show the above information on the venn diagram below. (3 marks)



- b) How many pupils like both subjects? (2 marks)
- c) How many pupils like English only? (2 marks)
- d) Find the number of pupils who like only one subject. (2 marks)
- 22. a) Solve: (3 marks)

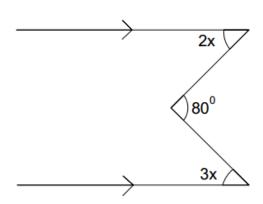
$$\frac{3^{(p+1)}}{4} = \frac{2^{(p+2)}}{3}$$

- b) If a = 8 and y = -12. Evaluate  $(a 2)^2$  (2 marks)
- 23. a fruit seller sells passion fruits in heaps of 20 for 1,000/=. If he has a sack having 4000 fruits;
  - a) How many heaps will he get from that sack? (2 marks)
  - b) How much money does he get after selling all the fruits? (2 marks)
  - c) If pays VAT of  $12\frac{1}{2}\%$  of his sales. Calculate the total amount he pays as VAT. (2 marks)
- 24. Using a pair of compasses, a ruler and a pencil only, construct a triangle WXY where angle  $YWX = 60^{0}$ , angle  $WXY = 30^{0}$  and side WX = 8cm. Drop a perpendicular from Y to meet WX at Z. (4 marks)
  - b) Measure length of side YZ. (1 mark)
- 25. Kato working alone takes 6 days to finish a job. Wasswa working alone takes 8 days to finish the same job.
  - a) How long does it take both of them to finish the job if they work together? (2 marks)
  - b) A pen and a book altogether cost shs. 1,500/=. If the book costs twice as much as the pen, calculate the cost of each. (2 marks)
- 26. a) Find the value of 5 3x 3 (2 marks)
  - b) Study the arrow diagram below and use it to write the mathematical sentence it represents.



a) Study the figure below and find the value of x

(3 marks)



- b) The ratio of the exterior angle to the interior angle of a regular polygon is 1:5.
- i) Calculate its exterior angle

(3 marks)

ii) Name the polygon.

(1 mark)

27. Naluwooza went shopping and bought the following items from Standard Super Market:

$$3\frac{1}{2}$$
 kg of sugar at shs. 2,200/= per kg

1 kg of salt at shs.800/= each kilo

4 bars of soap at shs. 2,500/= a bar

A 500gm tin of blue band at shs.4,000/= per kilogram

a) calculate her total expenditure

(5 marks)

b) If she was given a 10% discount, how much was the discount?

(2 marks)

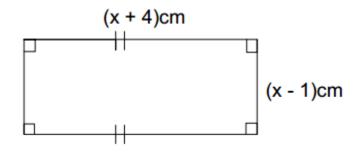
28. Three pupils Julia, Paul and Annet shared shs. 72,000/= among themselves in the ratio

5:3:4 respectively. How much did each one get?

(4 marks)

- 29. The perimeter of the rectangle below is 34cm.
  - a) Find the value of x

(3 marks)



b) Calculate the actual length.

(1 mark)

- c) Work out the width.
- (1 mark)
- d) Find the area of the rectangle above

(2 marks)

30. The table below shows the goals scored by Wabinoga football teams in a season.

Number of teams scoring	2	1	3	4
Number of goals scored	4	5	1	3

a) How many teams participated that season?

(2 marks)

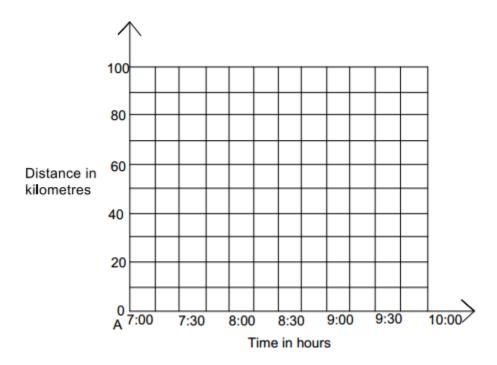
b) Find the mode of the goals scored.

(2 marks)

c) Workout the total number of goals scored.

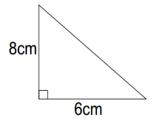
(2 marks)

31. Waswa started his journey from his home to town A at 7:00am. He was driving at a speed of 40km/hr. if he drove for two and half hours. Show his journey on the graph below and calculate the distance he covered.

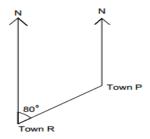


THE END.

- 1. Work out 5 1.4
- 2. Express 894.1 in the standard form
- 3. Solve  $2y^2 = 72$
- 4. Add  $1011_{two} + 111_{two}$
- 5. Hawaya's car broke down after he had covered 100km. If he had  $\frac{1}{3}$  of the journey left, how long wasthe journey?
- 6. Change 18:22 hours into 12 hour clock.
- 7. What is the next number in the sequence 1, 2, 4, 7, 11, ......
- 8. Peter sold a radio for shs. 18,000/== and made a profit of shs. 4,000/=. What was his buying price?
- 9. Find the median of these digits
  - 3, 5, -3, 2, -5, 6 and 4
- 10. Find he least number of oranges that can be divided by 6 pupils or 8 pupils without any remainder
- 11. Workout the distance around the figure below



- 12. Solve  $3^x \times 3 = 81$
- 13. Express MXLiX in Hindu Arabic numerals.
- 14. Anunga is 10 years than Anuku. If Anuku is P years, how old is Anungu?
- 15. The bearing of Town P from Town R is 080<sup>0</sup>. What is the bearing of R from P?



- 16. Convert 40m/sec to km/hr
- 17. Allan deposited shs. 50,000/= for 6 months at a rate of 2% per year. Calculate his simple interest.
- 18. The two supplementary angles are  $Z + 40^{0}$  and  $4Z + 30^{0}$  find the value of Z.
- 19. Below is the exchange rate table for Tinka Forex Bureau in Uganda

Type	Selling price	Buying price
U.S \$1	2,550	2,570
Kenya shillings Kshs. 1	28	30

If Patel had Ug shs. 49,000/=, how many U.S Dollars can he get?

20. Given that P = 5, R = -3, T = 3

Find 
$$\frac{R+P}{P}$$

## **SECTION B**

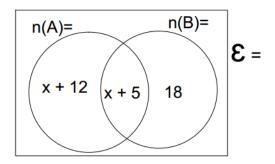
- 21. a) Work out  $\frac{0.42+0.36}{0.07+1.2}$  (2 marks) b) write 0.272727... as a rational number (2 marks)
- 22. The median of five consecutive integers is -1.
  - a) list down the integers

(2 marks)

b) Work out their range

(2 marks)

23. Study the Venn diagram below and answer the questions. Given that n(A) = 21



a) Find the value of X

(2 marks)

b) Find the number of elements in set B

(1 mark)

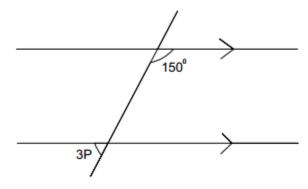
c) Find the number of elements in the universal set. (2 marks)

- 24. The average height of four blocks is two hundred centimentres. The sum height of three of the blocks is seven hundred centimetres.
  - a) What is the height of the 4<sup>th</sup> block?

(2 marks)

- b) Calculate the total height of 5 blocks if a block of height 150cm is added to the first 4 blocks. (3 marks)
- 25. a) Find the value of P in the diagram below.

(2 marks)



- b) What is the compliment of  $(X 40^0)$ ?
- 26. Ankemo was travelling from Kasese to Hoima via Fort Portal. He travelled from Kasese to Fort Portal at a speed of 60 km/hr for  $1\frac{1}{2}$  hours and continued to Hoima at a steady speed of speed of 95km/hr for 2 hours.
  - a) Calculate the total distance from the Kasese to Hoima.

(3 marks)

b) What was the total time taken for the whole journey?

(2 marks)

27. The table shows the number of tourists from different districts that visited Kanungu Tourist Hotel.

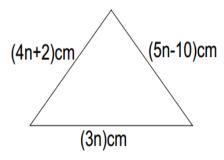
District	Kampala	Iganga	Rukungiri	Mbarara
No. of tourists	120	150	200	130

a) How many tourists visited the hotel?

(2 marks)

- b) If  $\frac{3}{10}$  of the tourists were women, how many women visited the hotel? (2 marks)
- c) Suppose each visitor paid shs. 12,000/= for meals, how much money was collected from men only? (2 marks)

28. The diagram below is a triangle whose perimeter is 64 cm. use it to answer the following questions.



a) Find the value of n.

(3 marks)

b) Work out the length of each side of the triangle.

(3 marks)

29. a) With the help of a ruler, a pencil and pair of compasses only, construct a triangle ABC where AB = 8cm, angle  $ABC = 60^{\circ}$  and angle  $= 45^{\circ}$ . (3 marks)

Drop a perpendicular line from C to meet line AB at D

(1 mark)

b) Calculate the area of triangle ABC

(2 marks)

30. Given that  $F_p = \{2_1, 2_2, 3_1, 5_1\}$  and  $F_{30} = \{2_1, 3_1, y\}$ 

a) Find the value of y.

(1 mark)

b) Find the value of P.

(1 mark)

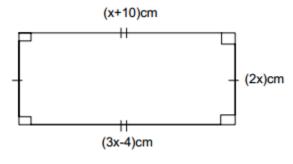
b) Find the G.C.F of P and 30.

(2 marks)

c) Calculate the LCM of P and 30.

(2 marks)

31. Below is a rectangle garden. Use it to answer the questions that follow.



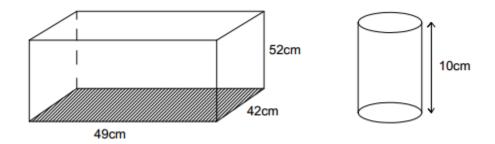
a) Find the value of x

(2 marks)

b) Calculate the area of the above garden.

(3 marks)

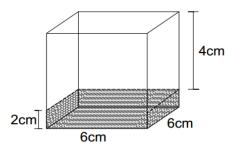
32. In a factory, splash cyndrical tins of diameter 7cm and height 10cm are to be packed in a big box measuring 49cm by 42cm by 52cm.



- a) Find the total number of tins that can be packed in this box. (3 marks)
- b) Calculate the volume of the space left after packing. (2 marks)

THE END.

- 1. Multiply: 257 by 2
- 2. Express a quarter of 1000 in words.
- 3. Work out the value of m n when n = -6 and m = -8
- 4. Kigere had shs. 500/= in his pocket. He used shs. 200/= to buy a pencil. Write the used amount as a decimal fraction of the whole amount.
- 5. What time is it "forty five minutes" before 8:20pm?
- 6. Add Xvii to Xiii. Leave your answer in Roman Numerals.
- 7. Write down the value of A and B in the sequence below.
- 8. Express 48 as a product of its prime factors.
- 9. What is the difference between 3x + y and x y?
- 10. Work out the volume of the liquid in the cube in the diagram below.



- 11. Three boys were given shs 36,000/= to share in the ratio 3:2:5. What was the smallest amount?
- 12. Musinguzi got 48 questions correct out of the 60 questions. Express his scores as a percentage.
- 13. Simplify:  $\frac{2}{5} \times \frac{1}{4} \div \frac{1}{20}$
- 14. Work out:

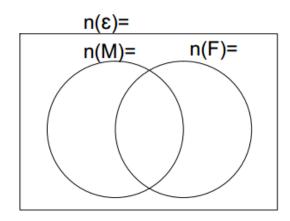
$$\frac{4C^{5} X 2C^{4}}{8C^{7}}$$

- 15. What is the value of n in the equation  $2n^2 = 32$ ?
- 16. Bitamazire tossed a dice once in the air. What is the probability that a composite number will appear on top?
- 17. A circle has a diameter of 14cm. Find the distance around the circle.

- 18. What is the simple interest on shs. 15,000/= borrowed for  $2\frac{1}{2}$  years at 5% interest per annum?
- 19. Musitwa spends 52% of his daily allowance on food and saves the rest. If he is given shs. 12,000/=. How much does he save?
- 20. Solve: 4y + 12 = 36

## **SECTION B**

- 21. a) Work out:  $\frac{3.6 \times 12.5}{2.4 0.15}$  (3 marks)
  - b)Simplify:  $\frac{1}{4}$  of  $(\frac{1}{10} + \frac{2}{5})$  (3 marks)
- 22. Mukasa left Kikigoli at 8:00am. While moving at a steady speed of 60km/hr and reached Kanipota town at midday. He returned to Kigoli town at an average speed of 80km/hr.
  - a) Find the distance between Kigoli town and Kanipota town. (2 marks)
  - b) Calculate the average speed of Mukasa for the whole journey. (2 marks)
- 23. a) A rectangular tank measures 50cm by 40cm by 30cm.If the tank is to be filled with water. How many litres does it hold?(2 marks)
  - b) Calculate the total surface area of the tank in square centimetres. (2 marks)
- 24. 60 people attended a wedding party at Wobulenzi town hall, 38 of these people ate Meat (M), 30 people ate Fish (F), and 2 people ate neither of the given items. If (20 + n) people ate Meat only,
  - a) Represent the above information on the venn diagram below. (2 marks)



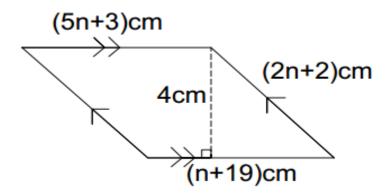
- b) Find the number of people who ate two types of sauce at the wedding party. (3 marks)
- c) What is the probability of choosing a master of ceremony from those who ate one type of sauce? (1 mark)
- 25. The mean score by six pupils in P.7 home work was 13. The marks scored were 7, 20, 15, 6, X and 10.
  - a) Find the value of X.

(3 marks)

b)Find the modal mark of the group.

(1 mark)

26. The diagram below represents the top of Ali's table. Use it to answer questions that follow.



a) What is the value of n?

(2 marks)

b) If he decided to paint it with vanish to make it smooth and good looking, what area did he paint with vanish? (2 marks)

c) What is the distance around that shape?

(2 marks)

27. The table below shows the exchange rates of different currencies in Uganda shillings. Use it to answer the questions that follow.

	Selling Rates	Buying Rates
Unit Currency	U Shs. To the	U Shs. From the
	Bank	Bank
1 pound Sterling (£1)	Shs. 3400	Shs. 3500
1 US dollar (US\$1)	Shs. 2400	Shs. 2500
1 Kenya Shillings (K Sh 1)	Shs. 24/50	Shs. 25/50
1 Rwanda France (R.F1)	Shs. 4/20	Shs. 4/50

a) The British tourist arrived in Uganda with £7000 and US\$1500.

Find how much money he had in Uganda Shillings. (3 marks)

b) Ddembe is leaving Uganda for U.S.A. He has U.Shs.62,500,000/=.

How many dollars will he spent from the Bank? (2)

(2 marks)

28. With the help of a ruler, pencil and a pair of compasses only, construct a

triangle with PQ = QR = 6cm and angle  $PQR = 120^{0}$ . (5 marks)

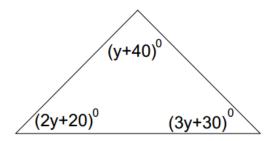
b) Measure: i) Length of PR (1 mark)

ii) Angle PRQ (1 mark)

29. a) Diana has three times as many cows as Jackie. Together they have 120 cows on their farm. Find the number of cows for each person. (2 marks)

b) Solve for 
$$n:\frac{1}{3}n + 20 = 2n$$
 (2 marks)

30. Below is a three sided polygon. Use it to answer the questions that follow.



a) What is the value of y in degees? (3 marks)

b) Work out the size of the largest angle. (3 marks)

31. Bogere went to the Supermarket and bought the following items.

2kg of Sugar at shs. 2,600/= each kg.

4 kg of Rice at shs. 13,600/=

 $2\frac{1}{2}$  kg of maize flour at shs. 2,000 per kg.

250gm of salt at shs. 1,200/= each kilo.

- a) At what price did he buy each kilogram of Rice? (2 marks)
- b) How much money did he spend on all the items? (4 marks)
- 32. a) Munaku has 20% more goats than sheep on his farm.

If he has 360 goats, find the percentage of goats on his farm. (2 marks)

b) How many sheep does he have on the farm?

THE END.

1. Add: 13 + 14

2. Simplify: 4a + 5a

3. Write 39 in Roman numerals

4. Simplify: -7 - -3

5. Express  $\frac{1}{2}$  as a decimal

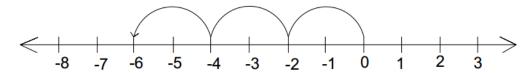
6. Write 19041 in words

7. Find the next number in the sequence

2, 3, 5, 7, .....

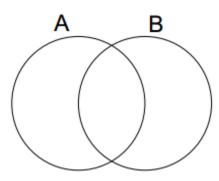
8. Solve for p: 3p - 3 = 3.

9. Write the multiplication statement shown on the number line below.



10. Construct an angle of 30° using a pair of compasses at point B.

11. In the diagram below, shade  $A \cap B$ .

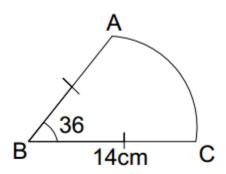


12. The temperature on a certain mountain was 20°C in the morning. In the afternoon, it rose by 12°C. What was the new temperature on the mountain that afternoon?

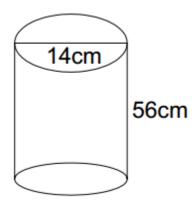
13. A meeting started at 11:30am and lasted for 50 minutes. At what time did it end?

14. In a class of 48 pupils, 12 are boys and the rest girls. Express the number of girls in the class as a percentage of the whole class.

15. Find the perimeter of the figure below.



- 16. Cards labeled 1-5 are folded and put in a bucket and mixed up. What is the probability of picking a card having a prime number?
- 17. Work out:  $\frac{1}{4} \frac{1}{2} + \frac{2}{5}$
- 18. A taxi can carry a maximum of 14 passengers in a single trip. How many passengers will carry the taxi carry in 10 trips?
- 19. Find the volume of the figure below.

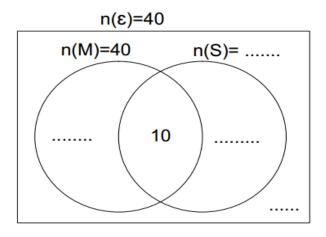


20. Add:

hours	Min
4	45
+ 3	20

# **SECTION B**

21. In a class of 40 pupils, 25 like Mathematics (M), 10 like both Math and Science, 5 like neither Science nor Mathematics and Y like only Science.



a) Complete the venn diagram using the given information.

(3 marks)

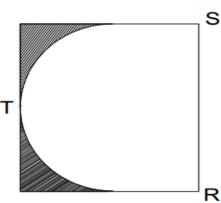
b) Find Y

(1 mark)

22. In the figure below, the length of arc RTS is 22cm. find the length of line RS

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

(4 marks)

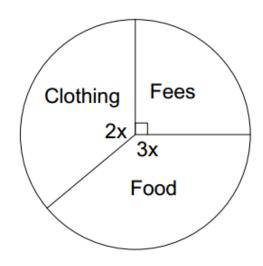


- 23. Nabwire went to the market and bought the following:
  - 3 dozens of exercise books at shs.2800 per dozen
  - 4 tablets of bathing soap at sh.4800.
  - 4 bars of washing soap at shs. 1900 per bar
  - 2 tubes of toothpastes at sh.800 per tube
  - a) How much did she spend altogether?

(4 marks)

b) If she was left with shs. 2400, how much money did she have at first? (2 marks)

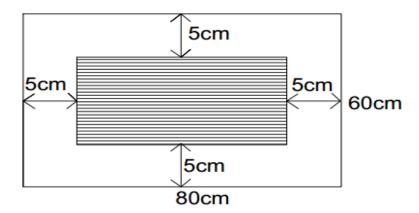
24. The pie-chart below shows Kato's monthly expenditure



a) Find the value of x

(2 marks)

- b) If he spends Sh. 720,000 per month, find the amount of money he spends on food. (2 marks)
- 25. A piece of cloth is laid at the centre of a table 80cm long and 60cm wide and it leaves 5cm all round as shown in the diagram below.



a) Find the area covered with the piece of cloth.

(3 marks)

b) Find the area which is not covered by the piece of cloth.

(3 marks)

26. a) Write 3409 in expanded form using the powers of ten.

(2 marks)

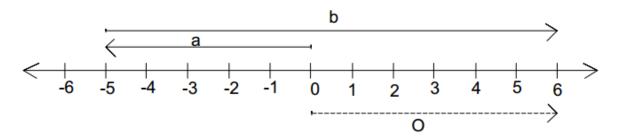
b) What is the place value of 4 in the number 240?

(2 marks)

27. a) Three children aged (x + 3), (3x - 10) and (2x + 5) have a total age of 34 years. How old is each child? (4 marks)

- b) Solve the inequality and give the solution set for x.  $2x \le 6$ . (2 marks)
- 28. a) Using a ruler and a pair of compasses only, construct a triangle ABC in which AB=6cm, angle BAC =  $45^{\circ}$  and angle ABC =  $90^{\circ}$ . (4 marks)
  - b) Measure BC (1 mark)
- 29. David has 20% more goats than sheep on his farm. If he has 360 goats, find the number of sheep on the farm. (4 marks)
  - b) Musa can dig a garden in 3 days. Fred can dig the same garden in 6 days. If both of them dig together at the same rate, how many days will they take to dig the garden?

    (2 marks)
- 30. Use the number line below to answer the questions that follow.



a) What integers are shown by the arrow?

(1 mark each)

- i) a
- ii) O
- iii) b

shown in the table below.

- b) Write the mathematical statement shown on the number line . (1 mark)
- 31. In a mathematics test given to a class, the marks scored, frequency and total marks are

Marks scored	Frequency	Total marks
4	4	16
	9	45
6		84
7	8	
8	5	40

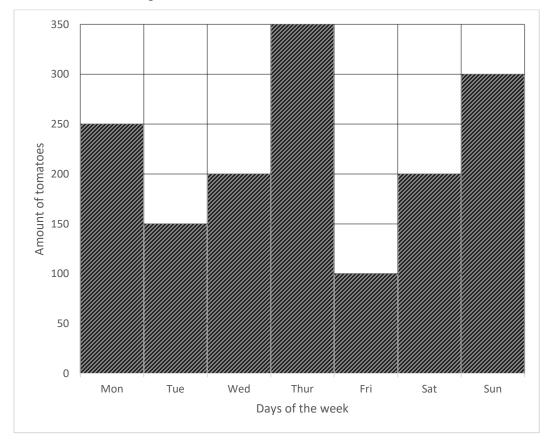
a) Complete the table above.

(2 marks)

b) What was the modal mark?

(2 marks)

32. The graph shows the amount of tomatoes picked on Kazei's farm in a particular week. Use it to answer the questions that follow.



- a) What was the difference between the highest and the lowest amounts of tomatoes picked in the week? (2 marks)
- b) Find the total amount of tomatoes picked on Monday and Wednesday. (2 marks)
- c) On which days was the same amount of tomatoes picked? (2 marks)

1. Add: 45 + 7.7

2. Simplify: 8x - 6m + 3m - 5x

3. Simplify: -10 - -4

4. Change 16ten into octal base

5. Write in figures: Seven thousand seven hundred seven

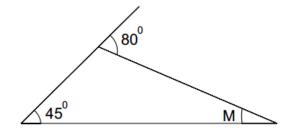
6. Besigye left Kasangati at 7:20pm and reached Wandegeya at 10:30pm. How long did the journey take?

7. The circumference of a circle is 44cm. Find its area.

8. Express 0.0064 in scientific notation.

9. A file contains 12 coloured papers and 18 white papers. What is the probability of picking a white paper at random?

10. Find the value of M in the figure below.



11. Simplify  $5\frac{1}{2} \times 12 + 12 \times \frac{1}{3}$  using distributive property

12. Express 30m/sec as Km/hr.

13. Using a pair of compasses, a ruler and a pencil only, construct an angle of 45<sup>0</sup>

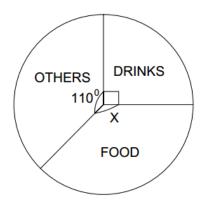
14. If  $\frac{3}{4}$  of a cake weigh 450 grammes. Find the actual weight of the whole cake.

15. Find the square root of  $7\frac{1}{9}$ .

16. Through what angle does the minute hand of a clock move from 9:00am to 9:20am?

17. Find the average of 3x, 4, x and 8.

18. The pie chart below shows Asuman's expenditure of shs. 36,000/= over the week. How much does he spend on food?



- 19. Hamza's and Hamisi's strides are 120cm and 150cm respectively. If they start moving from the same point in the same direction, how far apart will they be after each has made 14 strides?
- 20. The volume of a cylinder is 1540cm<sup>3</sup>. Find the height of the cylinder if the radius is 7cm.

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

#### **SECTION B**

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

n(ε)=

n(M)=
n(N)=

11
6
Υ

a) Find the value of Y.

(2 marks)

b) Find n(M)

(2 marks)

c) How many elements are there in the universal set?

(2 marks)

d) What is the probability of picking a member in set (N U M)

(2 marks)

22. Nakyanzi bought 30 eggs at 200/= each. While in transit X eggs got broken and she sold the remaining eggs each, thereby making a profit of 1,800/=. Find the value of X.

(3 marks)

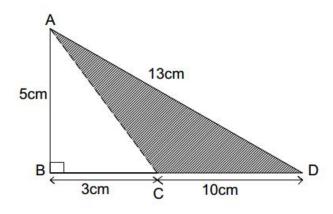
23. a) The area of a rectangular field is 0.45 hectares and its length is 90m. find its breadth.

$$(1ha = 10,000m^2)$$

(3 marks)

b) Calculate the area of the triangle ACD below.

(3 marks)



24. Ritah deposited shs. 72,000/= in a bank which gives 20% per annum simple interest for 8 months.

a) Calculate the simple interest.

(2 marks)

b) How much money will Ritah have after that period?

(2 marks)

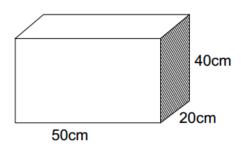
25. a) Simplify:  $\frac{0.8 \times 0.24}{0.4}$ 

(2 marks)

b) Express 0.2121.... as a common fraction in its lowest terms.

(2 marks)

26. Below is a cuboid, use it to answer the following questions.



a) Find the area of the shaded part.

(2 marks)

b) Work out its capacity in litres.

(3 marks)

27. Awio spends his monthly salary as follows:  $\frac{7}{12}$  on food,  $\frac{1}{4}$  on fees and the rest on rent.

Using a radius of 3cm, draw an accurate pie chart to show the above information.

(4 marks)

28. a) Solve: 5(K-2) - 3(K-4) = 6 (2 marks)

b) Solve: 
$$\frac{6}{K} + 3 = 21$$
 (2 marks)

- 29. In a Mathematics test given to a class, the marks scored, frequency and total marks scored are shown in the table below.
  - a) Complete the table correctly.

(3 marks)

Marks Scored	Frequency	Total Marks
5	4	(i)
5	9	45
(ii)	7	42
8	14	(iii)

b) What was the modal mark?

(1 mark)

c) What was the mean mark scored?

(2 marks)

30. Given that X = 2y + 1, complete the table below.

(5 marks)

X	1		7		11
Y		2		4	

- 31. Below are the existing exchange rates at Barclays Bank (U) Ltd.
  - 1 United States Dollar (US\$) = 2,350 Uganda Shillings (Ug.Shs.)
  - 1 Kenyan Shillings (K.Shs.) = 28 Uganda Shillings (Ug.Shs.)
  - a) Find the total amount in Uganda Shillings got from US\$400 and 100K.Shs. (3 marks)
  - b) How many US\$ will a tourist get from Ug.Shs.216,200/=? (2 marks)
- 32. The bearing of Town K from Town M is  $140^{0}$  and M from K is a distance of 80Km. The bearing of Town N from Town K is  $040^{0}$  and N from K is 120Km.
  - a) Draw an accurate diagram showing the three towns. (Use scale 1cm = 20km). (4 marks)
  - b) Find the shortest distance between Towns N and M in kilometres. (2 marks)

1. Divide 36 by 9

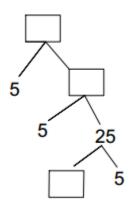
2. Solve 
$$3x^2 = 7$$

3. Write 2014 in Roman numerals.

4. A bird flew a distance of 800m in 20 seconds. What was its speed in km/hr.

5. Subtract (2x - 30) from (4x + 5)

6. Study the prime factorization and complete it.



7. An examination that lasted  $2\frac{1}{2}$  hours started at 12:40pm. At what time did iy end in 12 hour clock system?

8. When 240 is increased by x%, it becomes 270. Find x.

9. Write 105011 in words.

10. Change 41<sub>five</sub> to octal base

11. Write the next numbers in the sequence

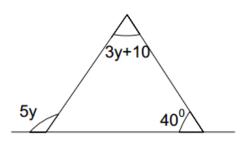
3, 7, 11, 15, .....

12. Simplify:  $\frac{1}{2} + \frac{1}{4} \div \frac{7}{8}$ 

13. What is the radius of a circle whose circumference is 440cm ( $\pi = 3\frac{1}{7}$ )

14. In the space below, construct an angle of  $75^0$ 

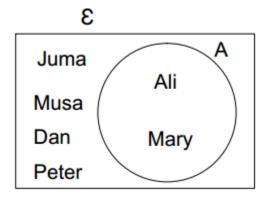
15. Calculate the value of y in the figure below



16. Find the median of the following

$$3, -2, 6, 7, 0, -5, 1$$

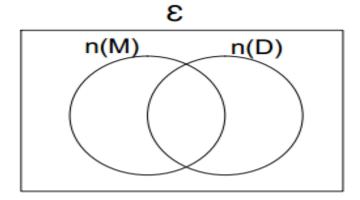
- 17. Simplify (-2) (-7)
- 18. A wheel has a diameter of 70cm. how many revolutions does it make to cover a distance of 2.2km.
- 19. Study the venn diagram below and find n(A)<sup>1</sup>



20. The interior angle to the exterior angle of a regular polygon is 3:2. Find the size of the exterior angle

### **SECTION B**

- 21. In a class of 36 pupils, X pupils like Music (M) only, 11 pupils like both Music and Drama (D), 22 pupils like Drama while 2 pupils like neither Music nor Drama.
  - a) Show the information on a venn diagram



- b) Find the number of pupils who like Music only.
- c) If a pupil is chosen at random to be the class monitor, what is the probability that he likes neither Music nor Drama?

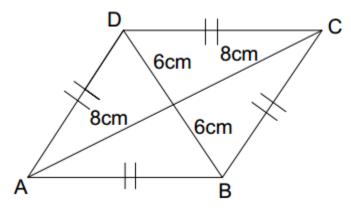
22. a) Work out: 
$$\frac{0.84-0.2}{0.08}$$

b) The difference between  $\frac{1}{6}$  and  $\frac{1}{8}$  of a number is 10. What is the number?

23. a) Given that 
$$34p = 34_{six}$$
, find base p

b) Solve 
$$2x + 3 = 1 \pmod{8}$$

- 24. sendi is three times as old as his son Joseph. In 10 years time, their total age will be 56 years.
  - a) How old is the son now?
  - b) What will be the difference in their age in 10 years time?
- 25. The diagram below is a rhombus.



- a) Find length AB.
- b) Calculate the area of the figure ABCD
- c) Determine the perimeter of the rhombus
- 26. Abey, Jack and Christine shared money in the ratio 4:6:5 respectively. If Jack got shs. 2000 more than Abey.
  - a) How much did they share altogether)
  - b) How much did each one get?
- 27. a) Simplify 2(3x-4)-3(x-4)
  - b) Solve: 4(x + 2) 3(x + 4)
- 28. Below is the frequency table that shows marks scored by pupils in P.7 marked out of 50

Marks	35	20	30	15	25
No. of pupils	5	3	1	4	2

- a) How many pupils are in the class
- b) What is the modal frequency
- c) How many pupils scored below the mean mark?
- 29. a) Find the value of P if  $3^8 \times 3^P \div 3^8 = 1$ 
  - b) Find the number which has been expanded below.

$$(3 \times 10^3) + (4 \times 10^2) + (6 \times 10^{-2})$$

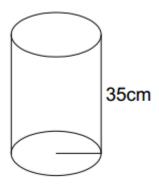
30. Maria Mungu has 25,000/= and went to the supermarket and bought the following items shown in the table.

Complete the table....

Item	Quantity	Unit cost	Amount
Sugar	3kg	2200/=	
Posho	5kg		6000/=
Salt		800/=	1200/=
Rice	$2\frac{1}{2}$ kg		7500/=

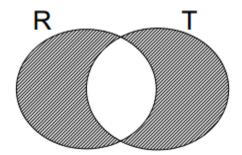
- b) Calculate his balance
- 31. Using a pair of compass, a ruler and a pencil, construct a triangle XYZ such that XY = 6cm, angle  $XYZ = 120^{0}$ , and angle  $X = 30^{0}$ . Drop a perpendicular from Z to meet XY at M.
  - b) Measure ZM
  - c) Using ZM as the height, and XY as the base, determine the area of the triangle XYZ.

32. Below is a container which is filled with 44 litres of passion fruit juice.

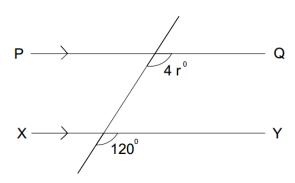


- a) Determine its radius
- b) If this juice is sold in half litre glasses at 500/=, how much money does the seller collect after selling all the juice?

- 1. Work out: 63 + 24
- 2. Write in words: 2014
- 3. Simplify: 3n + 5m 8n
- 4. On the venn diagram below, describe the part shaded



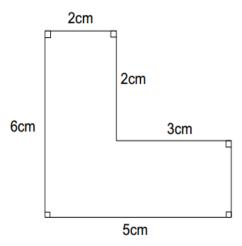
- 5. Work out: -7 -8
- 6. Simplify:  $\frac{5}{6} \frac{1}{3}$
- 7. Find the next two numbers in the following sequence
  - 3, 5, 8, 13, ......
- 8. In the figure below, PQ is parallel to XY. Calculate the value of r in degrees



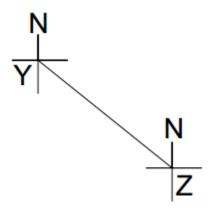
- 9. Five pens cost sh. 3,000. How much will a pupil pay for 3 such pens?
- 10. A die was tossed once. What was the probability that a square number showed up?
- 11. Subtract:

Hrs	Mins
9	25
- 3	50

12. Find the distance around the figure below



- 13. If set L has 15 proper subsets, how many elements does set L have?
- 14. Write 104 in Roman numerals
- 15. Work out:  $1100_{two} 101_{two}$
- 16. Natasha got a loan of shs.600,000 from PEWOSA at 5% per month. Find the interest she paid back after a period of  $\frac{1}{2}$  a year.
- 17. At a certain school, trees were planted in lines where by a mango tree is the 11<sup>th</sup> from either sides. How many trees were planted in each line?
- 18. Find the Highest Common Divisor (H.C.D) of 42 and 63
- 19. The bearing of Y from Z is 320°. Find the bearing of Z from Y using the diagram below



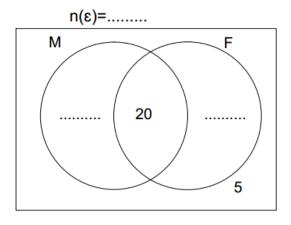
20. ????

### **SECTION B**

21. At a bank the exchange rates are shown in the table below

CURRENCY	BUYING RATES	SELLING RATES
\$ 1 (US Dollars)	Ug. Shs. 2500	Ug. Shs. 2600
Ksh 1 (Kenyan shillings)	Ug.shs 27	Ug.shs 28

- a) If a tourist sold 200 dollars and 400 kenya shillings to the bank, how much in Uganda currency did she get? (3 marks)
- b) Rama had Ug shs. 1,300,000. How many dollars did he get from the bank? (2 marks)
- 22. A group of 5p tourists, 35 visited forests (F) only, 20 visited both forests and mountains (M), 60 visited mountains and 5 visited lakes and rivers.
  - a) Use the information given above to complete the venn diagram below (3 marks)



b) Find the value of P

- (2 marks)
- c) If a tourist was picked at random to give a speech. What is the probability that the tourist visited mountains? (1 mark)

- 23. Use 2,035 to answer the questions that questions that follow
  - a) find the product of the value of 2 and the value of 3
- (2 marks)

b) show the number on the abacus

(2 marks)



24. a) subtract:

$$2a + 3b$$
 from  $6a + 5b$  (2marks)

b) 
$$\frac{1X}{3} + 3 = 2x - 2$$

- (3 marks)
- 25. Tana drove from Kampala to Iganga for 4 hours at speed of 60km/hr. He left Iganga at 3:00pm abd drove back to Kampala at a steady speed of 80km/hr after resting for an hour.
  - a) At what time did Tana reach Kampala?
- (3 marks)
- b) Calculate Tana's average speed for the whole journey
- (2 marks)
- 26. The table below shows the magic square. Study it carefully and complete it. (5 marks)

1	15	14	
12	6		9
8		11	5
13	3		16

27. a) Using a pair of compasses, a ruler and a pencil only, construct a rhombus PQRS in

which PQ = 6cm and angle  $PQR = 120^{0}$ 

(4 marks)

b) Measure the shorter diagonal.

(1 mark)

28. a) Simplify: 
$$\frac{3.6 \times 0.008}{0.16 \times 0.9}$$
 (3 marks)

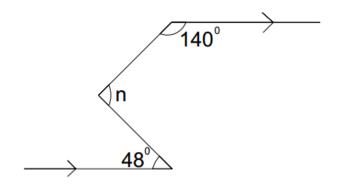
- b) Primary Seven has three streams, Bright, Sharp and Genius. They shared a certain number of books in the ratio of 5:3:4 respectively. If P7 Sharp got 36 books, find the number of books they shared altogether. (2 marks)
- 29. The table below shows marks gained by the number of pupils and the total marks. Study it and answers questions that follow.

Marks gained	Number of pupils	Total marks
6	6	
	2	14
8		24
10	5	50
4		16

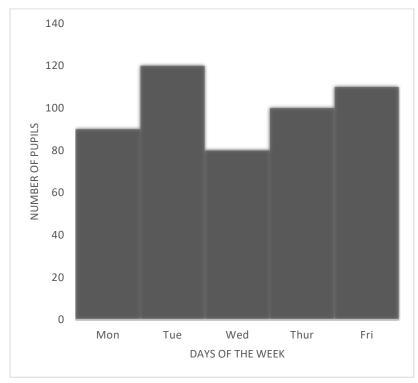
a) Complete the table above. (4 marks)

b) complete the mean mark (2 marks)

- 30. A square sitting room floor of length 6 meters needs to be covered by tiles.
  - a) If each tile measures 30cm by 30cm, how many tiles would be needed to cover the floor? (2 marks)
  - b) If the cost of each tile is sh.1200, how much money is needed to buy the tiles?
- 31. a) The interior angle of a regular polygon is 120. How many sides does it have? (2 marks)
  - b) In the diagram below, calculate the value of n (2 marks)



32. The bar graph below represents the attendance of primary seven class of a certain week. Study it carefully and answer the questions about it.

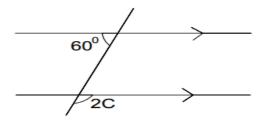


a) How many pupils were absent on Monday?

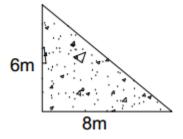
- (1 mark)
- b) How many more pupils attended on Tuesday than Friday?
- (1 mark)
- c) Find the average attendance for the whole week.
- (3 marks)

THE END.

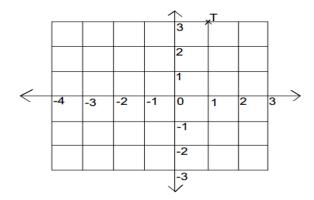
- 1. Multiply  $43 \times 7 =$
- 2. Solve  $\frac{1}{3}t = 4$
- 3. Workout the sum of all prime numbers between 90 and 100
- 4. Work out the size of angle marked C



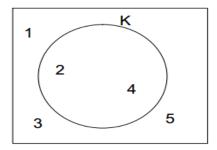
- 5. Write the exact time in 24 hour clock equivalent to 7:27p.m.
- 6. What is 24 in binary system?
- 7. Joan has a triangular garden as shown below. Work out the distance around the garden.



- 8. What Hindu Arabic numeral is represented by Roman Numeral DCLXVi
- 9. At a football match, the ratio of male to female spectators was 4:9. If 108 spectators were females, how many altogether attended the match?
- 10. Set  $H = \{4, 5, 6, 7, 8\}$  and set  $F = \{Multiples \text{ of } 3 \text{ less than } 12\}$ . Find n(F H).
- 11. On a poultry farm, birds laid eggs s shown: 11, 13,12, 11,16, 21, 9. Calculate the average number of eggs laid daily.
- 12. State the co-ordinates of point T shown on the grid below



- 13. Aunt Winene left her home at 8:40am and retuened at 1:20pm. For how long was she away from home?
- 14. Calculate the circumference of a circle whose radius is 4.2m.
- 15. Prime factorie 32 and write your answer in power form
- 16. Use the venn diagram to find the complement of set K



- 17. Divide  $2\frac{1}{2}$  by  $\frac{1}{3}$
- 18. Odele is 2 years older than his sister. Their total age is 22 years. How old is the sister?
- 19. Given that b = 2, c = -3, d = 0 and e = 5.

**Evaluate** 

$$\frac{\text{ed}^2 + \text{b}}{\text{e} - \text{c}}$$

20. If 1 Kenya shilling (1 Ksh) buys Uganda shillings 20. How much will a hen cost in Ksh if it costs Uganda shillings 13,000/=.

### **SECTION B**

- 21. If 111 is the sum of three consecutive odd numbers.
  - a) find the numbers

(4 marks)

b) work out the product of the first and second number.

(1 mark)

22. a) Given r = 2, s = -2, t = 3 and u = 4. Work out  $\frac{su + t}{r + t}$ 

(2 marks)

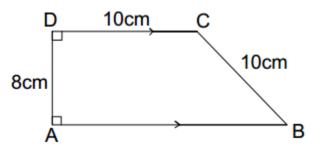
b) solve for K in the equation

$$7(K+3) - (2K-4) = 35$$

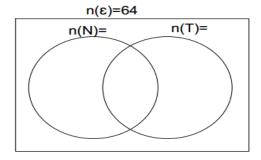
(2 marks)

23. on a ceremony at Murubya Primary School in Hoima, 40% were students, 20% were teachers, 25% were visitors while the rest were members of the non-teaching staff. Use the information above to construct a pie-chart of radius 3.5cm. (5 marks)

- 24. the ratio of ducks to hens to turkeys on a poultry farm is 3:4:2 respectively. If the total number of birds on the farm is 630.
  - a) How many birds are the hens? (3 marks)
  - b) How many more ducks than turkeys are on the farm? (2 marks)
- 25. The figure below is a trapezium. Find length AB (3 marks)



- b) calculate the area of the figure.
- (3 marks)
- 26. In a bus of 64 passengers travelling from Kisoro to Kampala. 30 had Nokia phones (N),
  - 41 had Techno phones (T). only 2 had n phones while X had both types of phones.
  - a) Represent the above information on the venn diagram below. (3 marks)



- b) Find the number of passengers who had Techno phones only. (2 marks)
- c) What is the probability of selecting a passenger without a Nokia phone? (2 marks)
- 27. Given the number 2,997
  - a) Round off the number to the nearest hundredths (1 mark)
  - b) Work out the difference between the value of 2 and 7 in the number above (3 marks)
- 28. a) with the help of a pair of compasses, a ruler and a pencil only, construct a triangle
  - CLH where CH = 7cm, angle CHL =  $30^{\circ}$ , and angle HCL =  $90^{\circ}$ . (4 marks)
  - b) From your diagram above measure length HL in centimetres. (1 mark)
- 29. Amanda went shopping with a bundle of shs. 5,000 notes numbered from MT000348397 to MT00348404 and bought the following items.
  - 2 litres of milk at shs.1,200/= a litre.
  - 3 kg of sugar at shs. 8,000/= per kg

500gm of tea leaves at shs.2,000/= per kg

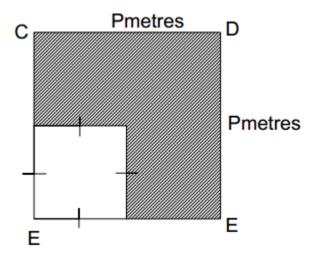
- 2 loaves of bread for shs.7,200/=
- a) How much money did Amanda have at first? (2 marks)
- b) Find how much remained after buying all the items above. (4 marks)
- 30. a) Work out 2 x 4 using a number line.

(2 marks)

b) solve and write the solution set for:  $-10 \le -5m \le 15$ 

(2 marks)

- 31. The figure below is a square plot of land CDEF which measures P by P. if the shaded part was sold was sold off and the area of the unsold part is 64m<sup>2</sup>.
  - a) Work out the length EE.



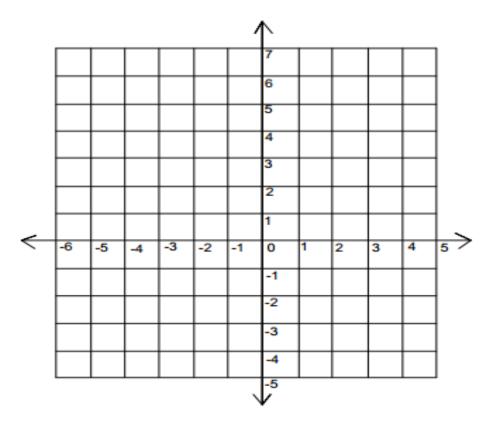
b) Find the area of the whole plot of land

(2 marks)

- c) If poles were planted 2m apart from C to D. How many poles were used? (4 marks)
- 32. Plot the following co-ordinates on the grid below.

$$H(+1, +4)$$
,  $I(+3, 0)$ ,  $J(+1, -3)$  and  $K(-1,0)$ 

(2 marks)



i) Join H to I, I to J, J to K and K to H

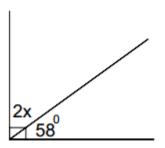
(1 mark)

ii) Name the figure formed above.

(1 mark)

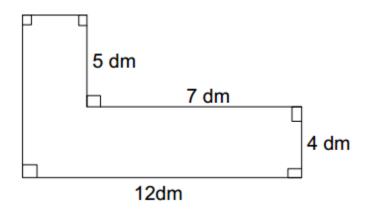
THE END.

- 1. Mulyiply: 12 x 4
- 2. Simplify: +9 +7
- 3. Convert  $\frac{3}{5}$  to decimal number
- 4. Set  $W = \{2, 3, 4, 5, 6\}$  and set  $Z = \{1, 3, 5, 7, 9\}$ . Find n(W Z)
- 5. Find the value of x in the diagram



- 6. Simplify:  $(26 \times 8) + (8 \times 14)$  using distributive property
- 7. Calculate the mean of 32, 48, 55 and 25
- 8. Simplify:  $\frac{0.07+0.11}{0.9}$
- 9. Add:  $1011_{two} + 11_{two}$
- 10. Solve for n in 2n 6 = 0
- 11. Given a = 4, b = 3 and c = 5. Evaluate  $\frac{1}{3}$  (bc) -a
- 12. Express 0.095 in standard notation
- 13. Use a ruler, a pencil and a pair of compasses only an angle of  $22.5^{\circ}$
- 14. Walugembe was given a bundle of notes numbered consecutively from AP 0085200 to AP 0085399. How many notes did he receive?
- 15. Rose sold an article at a loss of 16%. At what price she sell the article if she bought it at sh.25,000?
- 16. Express 5,297 kg as grams
- 17. Work out the HCF of 18 and 24
- 18. The circumference of a circle is 88cm. find its diameter.
- 19. Work out 4 + 5 = (finite 7)

20. Calculate the distance around the figure.



## **SECTION B**

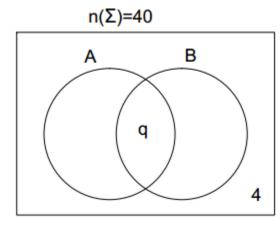
- 21. a) Add 24 and 176 and give your answer on the abacus
- (2 marks)

b) Express the sum of numerals to Roman numerals

(2 marks)

c) Write in words the answer in (b) above

- (1 mark)
- 22. Given that  $n(\varepsilon) = 40$ , n(A) = 23, n(B) = 15,  $n(AuB)^{1} = 4$  and n(AnB) = q.
  - a) Represent the above information on the venn diagram.
- (2 marks)



- b. i) Find n(AnB)
- (2 marks)

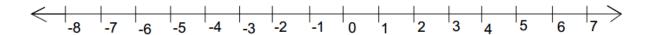
- ii) Find n(AnB)<sup>1</sup>
- (2 marks)
- 23. A bus covered a distance of 720km in 10 hours. Express the period of time to seconds.

(2 marks)

- b) Give the distance in metres.
- (2 marks)
- c) What was the speed of the bus in m/sec?
- (2 marks)

24. Multiply 2 x 3 using the number line.

(2 marks)



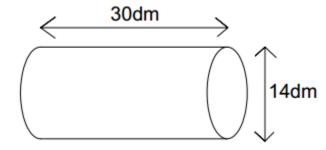
b) Find the range of -11 and -4

- (2 marks)
- 25. Given that x = 2y 3 and  $y = \frac{x+3}{2}$ . Complete the blank spaces (6 marks)

X	1		17		4	
у		$1\frac{1}{2}$		7		1

26. a) Calculate the volume of the cylinder below.

(2 marks)



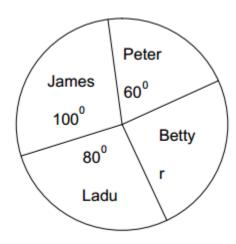
b) Find the area of the curved surface

- (2 marks)
- 27.  $\frac{3}{7}$  of the fruits in the basket are mangoes,  $\frac{1}{3}$  of the remainder are oranges and 24 are apples.
  - a) What fraction represents oranges in the basket?
- (2 marks)

b) Find the number of fruits in the basket.

- (2 marks)
- 28. a) The interior angle sum of a regular polygon is 900°. Calculate the number of sides of the polygon. (2 marks)
  - b) Calculate the perimeter of the polygon if its length is  $5\ \mathrm{dm}$ .
- (2 marks)

29. The pie chart shows a distribution of 720 dollars among four pupils from Sudan.



a) Find the angle that is represented by r.

- (2 marks)
- b) If the exchange rate is 1 dollar is equal to shs. 2,200. Find the amount Ladu got in Uganda currency (3 marks)
  - 30. Solve for x in  $\frac{2}{x} + 5 = 11$

(3 marks)

b) Subtract 2(n + 1) from 3n + 3

- (2 marks)
- 31. The LCM of two numbers is 90 and the GCF is 15. If one of the numbers is 30.
  - a) Find the second number

- (2 marks)
- b) The list below shows consecutive five multiples of a number 27, 36, 45, 54, 63. What is the number? (2 marks)
- 32. The bearing of town B from town A is  $050^0$  and the distance between town A and town B is 40km. The bearing of town C from town B is  $130^0$  and the distance between town B and town C is 30km.
  - a) Draw an accurate diagram showing the three places. (use the scale 1cm to represent 5km) (5 marks)
  - b) Find the shortest distance between town A and town C in kilometres. (1 mark)

THE END.