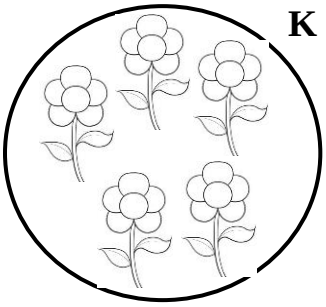
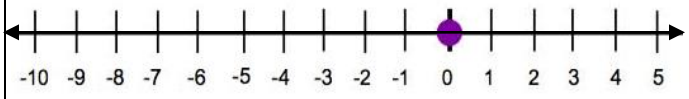
SET ONE

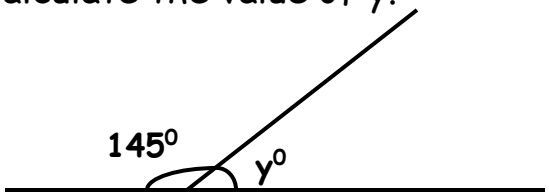
SECTION A (20 QUESTIONS – 40 MARKS)

1. Subtract; 3 – 2	2. How many members are in set K?  K _____
3. Given the number 5783. Find the sum of the value of 5 and the value of 8.	4. Mummy bought 2 kilograms of sugar on Monday. How many grams did she buy?
5. With the help of a pencil, ruler and pair of compasses, construct an angle of 45^0	6. How many half litre containers of water can be used to fill a 10 litre jerrycan?

7. A mathematics exam began at 8:00am and ended at 10:30am . How long did it last?	8. Zungululu bought a goat at shs. 67,000. At what price must he sell it to get a profit of shs. 25,000?
9. Use the numberline below to work out; 2 + ⁻ 4 = _____  	10. What distance does a cyclist cover at a speed of 60km/hr for 3 hours?
11. Write 116 in Roman numerals.	12. Work out; 98 + 12 x 3
13. Find the least number of bags that can be given to either 8 boys or 9 boys leaving no remainder.	14. Apply Bodmas to work out. $\frac{1}{2} - \frac{1}{4} + \frac{1}{3}$

15. If  represents 10 balls, draw pictures to represent 50 balls.

16. Calculate the value of y.



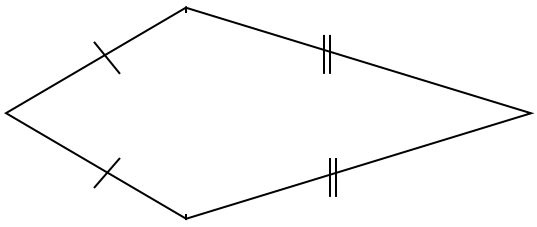
17. Arrange $\frac{2}{3}$, $\frac{1}{4}$, and $\frac{1}{2}$, starting with the biggest.

18. Work out;

Hrs	Mins
3	40
+ 2	30

19. Convert 101_{five} to base ten.

20. Indicate the lines of folding symmetry on the shape below.

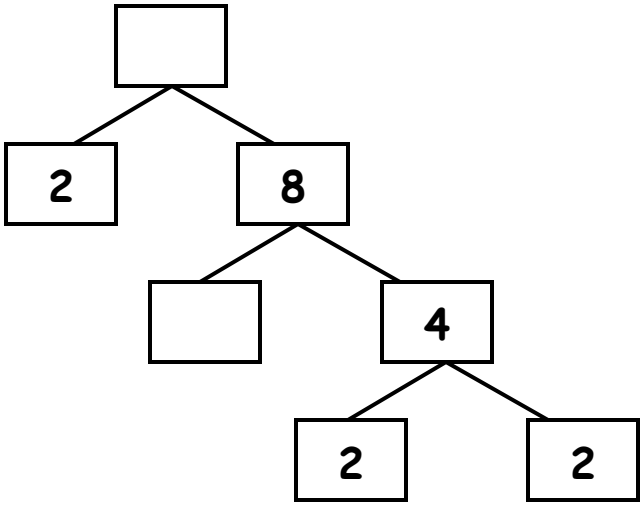


SECTION B (12 QUESTIONS – 60 MARKS)

21. (a) Write 295 in words.	**(2 marks)**
(b) Expand 525 using; (i) values	**(2 marks)**
(ii) powers of 10	**(2 marks)**
22. (a) Find the product of 234 and 25.	**(2 marks)**
(b) Use long division to divide 187 by 11	**(2 marks)**

23. In a group of 450 people, $\frac{3}{5}$ are males and the rest are females. (a) Find the fraction of females	**(2 marks)**
(b) How many females are in the group?	**(3 marks)**
24. Given that m = 5, y = 4 and k = 2, find the value of; (i) myk =	**(2 marks)**
(ii) 6y+m =	**(2 marks)**
(iii) $\frac{7y}{k}$	**(2 marks)**

25. (a) Fill in the missing figures. **(2 marks)**

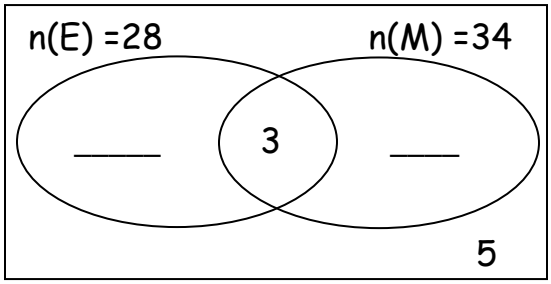


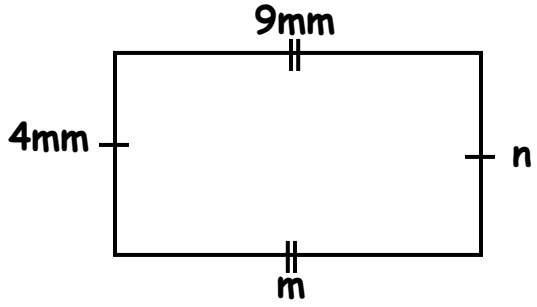
(b) Find the LCM of 12 and 16 **(1 mark)**

(c) Add: $\frac{3}{6}+\frac{1}{12}=$ **(1 mark)**

26. In a class, 28 pupils like English (E), 34 pupils like Maths (M), 3 pupils like both and 5 pupils do not like any of the two subjects. **(2 marks)**

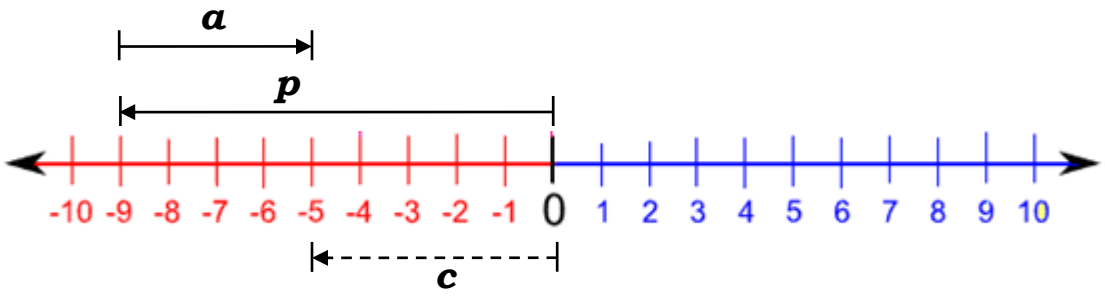
(a) Complete the venn diagram below.



(b) How many pupils like only one subject?	**(1 mark)**
(c) How many pupils do not like English?	**(1 mark)**
27. Given the shape below, use it to answer the questions that follow.  (a) Find the value of ; (i) n (ii) m	**(2 marks)**
(b) Name the shape	**(1 mark)**
(c) Find the area of the shape.	**(2 marks)**

28.	Tabitha went to the market and bought the following items. 2 packets of spaghetti at shs. 3000 each. 2kgs of sugar at shs. 3200 each. 4 shopping bags at shs. 700 per bag. 3 rulers at shs. 1500 (a) How much was her total expenditure?	**(4 marks)**
	(b) If she went with a twenty thousand shilling note and bought all the items, what was her change?	**(2 marks)**

29. Use the numberline below to answer questions.

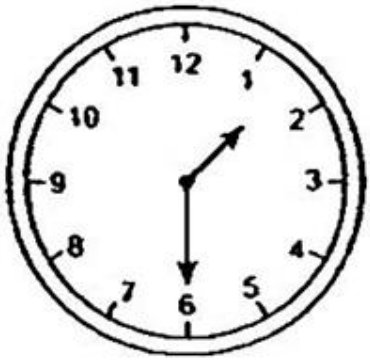


(a)Find the value of;

(i) ***c =*** _____ ***(ii) p =*** _____ ***(iii) a =*** _____ **(3 marks)**

(b) State the mathematical statement for the above numberline. **(2 marks)**

30. (a) What morning time is shown on the clock face? **(2 marks)**



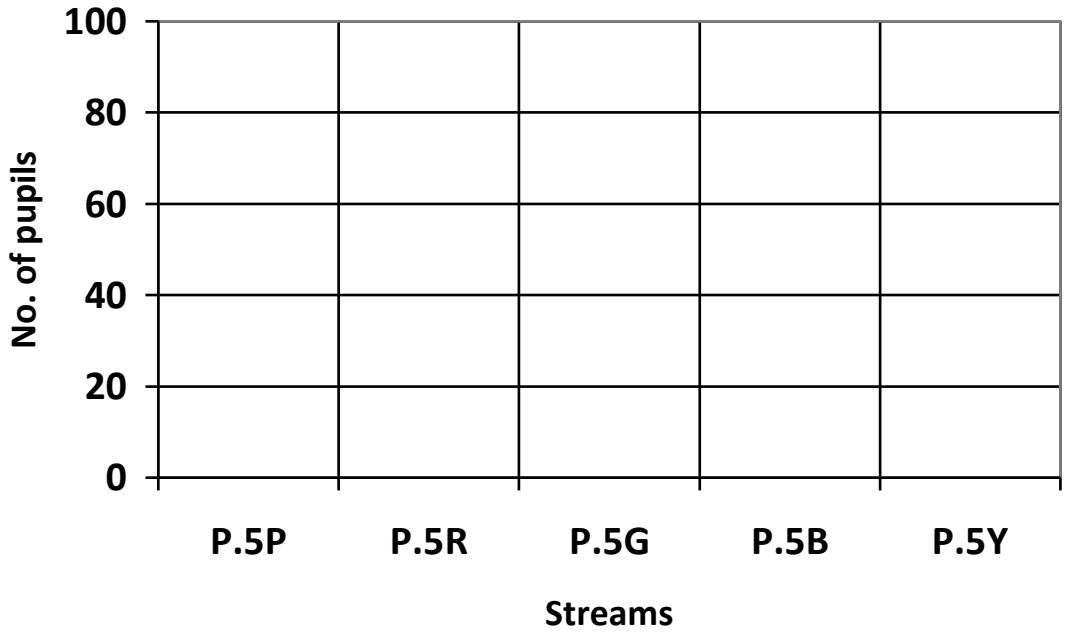
(b) Change 6 hours into minutes. **(2 marks)**

31. (a) Construct a triangle XYZ where XY = 7cm, angle ZXY = 60^0 and XZ = 5cm.	**(4 marks)**
(b) Measure line YZ	**(1 mark)**

32. The table below shows the number of wrappers distributed to the 5 streams of primary five. **(5 marks)**

Stream	P.5P	P.5R	P.5G	P.5B	P.5Y
No. of pupils	70	90	50	70	40

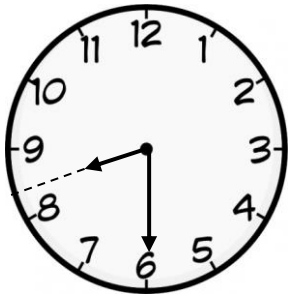
(a) Represent the above information on a bar graph below.

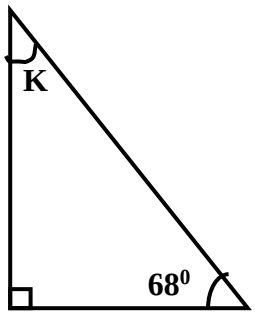


(b) If the wrappers were to be distributed equally to all the above streams, how many wrappers would each stream get? **(1 mark)**

SET TWO

SECTION A – (40 MARKS)

1. Work out: 2 4 x 2 _____	2. Set A = { a, b , c , d} B = { a , e , I , o , u} . Find A∪B.
3. What is the value of 7 in 9752?	4. Find the product of the next two numbers in the sequence. 60, 50, 40, 30, ____ , ___
5. Jonathan had sh. 20,000 and used $\frac{2}{5}$ of it for buying cakes. How much money did he remain with?	6. Tell the morning time shown on the clock face below. 
7. Mr. Kagoro bought a radio at shs.50,000 and sold it at shs.56,000. Calculate his profit.	8. Draw a line segment AB = 6cm.
9. Express 141_{five} in base ten.	10. Work out: 6.2 + 3.4 – 4.7

11. Kamya borrowed 39 books from the library. Write the number of books he borrowed in Roman Numerals.	12. Given that P = 4 and Q = 7. Find the value of $\frac{PQ}{2}$
13. Change 3 metres to centimeters.	14. Calculate the size of angle **K**. 
15. Multiply: 3 6 x 1 2 _____	16. Jackson covered a certain Journey at a speed of 60km/hr for 4 hours. Find the distance he covered.
17. Find the number which was prime factorized to get, 2 x 2 x 3 x 3.	18. What integer is three steps to the left of +3?

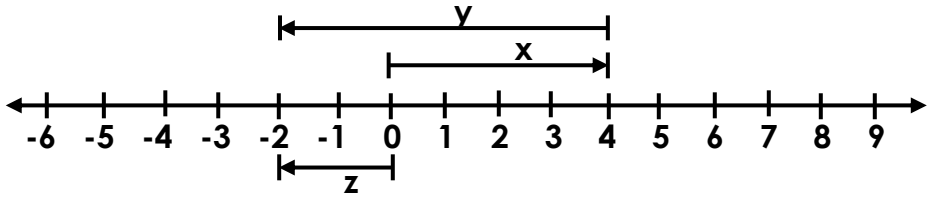
19. Subtract: $\frac{2}{3}$ from $\frac{3}{4}$	20. Find the range; 6 , 7 , 5 , 9 , 1 and 0.

SECTION B – (60 MARKS)

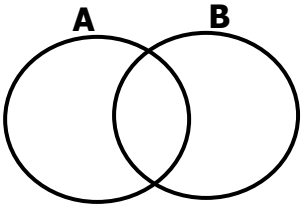
21. The table below shows the daily attendance of 60 pupils of a P.5 class in a certain school. (a) Complete the table correctly.	(1 mark @)

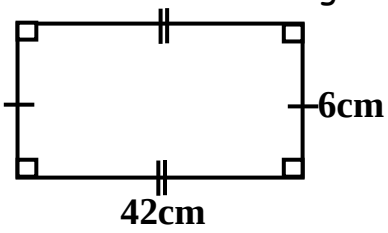
Day	**M**	**T**	**W**	**T**	**F**
Present	48	___	50	___	42
Absent	___	00	___	14	18

(b) Work out the average attendance for the whole week.	(2 marks)

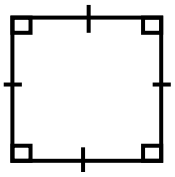
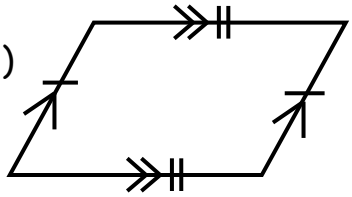
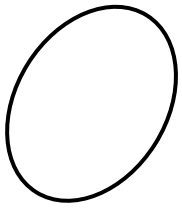
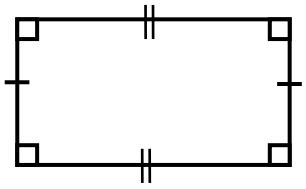
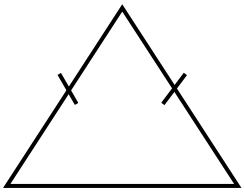
22. Fill in the missing number. $\square \div 6 = 7$	(2 marks)
(b) Find the value of h. $2h + 7 = 13$	(2 marks)
(c) Simplify: 3m + 4h + 2m + h	(1 mark)
23. Study the numberline below and answer questions that follow.  (a) What integers are represented by ; (i) Y = _____ (ii) X = _____ (iii) Z = _____	(1 mark @)
(b) Write the addition mathematical sentence of the above number line.	(1 mark)

24. Magala went to the shop and bought the following items. 2kg of sugar at shs. 4500 per kg. 1 kg of salt at shs.1200. 3 books at shs.2000 each book. 1 pen at shs. 1000. (a) Find his total expenditure.	(4 marks)
(b) If he was given change of Shs.2800, how much money did he give to the shopkeeper?	(2 marks)
25. (a) Find the sum of 5 4 7 8 9 4 and 2 6 2 1 0 3.	(2 marks)
(b) Work out: $\sqrt[3]{480}$	(2 marks)

26. Given that A = { 1 , 3 , 5 , 7 , 9} B = { 1 , 2 , 4 , 6 , 8} (a) Represent the above informaton on the venn diagram below.  	(3 marks)
(b) Find (i) A∩B (ii) ∩ (A∪B)	(1 mark) (1 mark)
27. Work out: (a) Years months 5 3 + 2 9 _____ _____	(2 marks)
(b) Hours minutes 4 25 + 6 15 _____ _____	(1 mark)

(c) Change 24 days to weeks.	(2 marks)
28. The figure below is a rectangle.  (a) Calculate the area of the figure.	(2 marks)
(b) Find the perimeter of the figure.	(2 marks)
29. In a group of 48 people, $\frac{2}{3}$ of them eat rice and the rest eat matooke? (a) Find the fraction of the people who eat Matooke.	(2 marks)

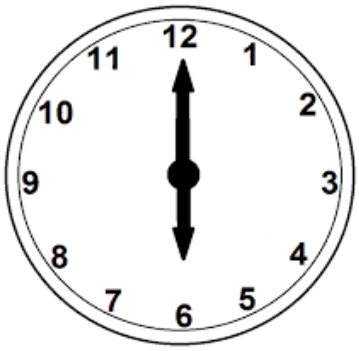
(b) How many people eat rice?	(2 marks)
(c) How many more people eat rice than Matooke?	(2 marks)
30. Given the number 30127. (a) (i) Find the value of the digit in the Hundreds.	(2 marks)
(ii) Expand the above number using place values.	(2 marks)
(b)Write XLIX in Hindu Arabic numerals.	(2 marks)

31.(a) Name the following shapes. (i)  _____ (ii)  _____ (iii)  _____	(1 mark @)
(b) Show and write the lines of symmetry of the following shapes. (i)  _____ (ii)  _____	
32. With the help of a pair of compasses , a ruler and a sharp pencil only, construct a square JKLM whose side measure 5cm.	

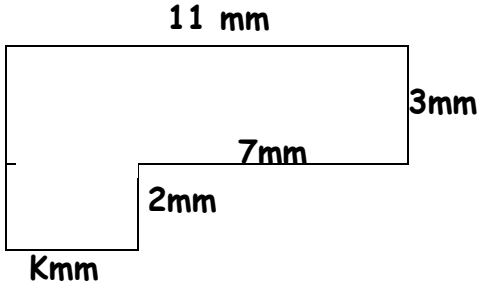
SET THREE

SECTION A (20 QUESTIONS – 40 MARKS)

21. Take away; 7 – 2 _____ _____	22. Write 448 in words.
23. If one book costs shs. 500. How many books will Kalungi buy with shs. 5,000?	24. Convert 8 metres to cm.
25. Find the least number that can be divisible by either 8 or 12 leaving no remainder.	26. Set A = {a, e, i, o, u}. How many subsets are in set A?

27. Tell the time shown on the clock  	28. Simplify ; 3a + a – 2a
29. Change 141_{five} to base ten.	30. Jammy scored the following marks in End of year exams. 93, 85, 90 and 80. Calculate Jammy's average score.
31. A cyclist takes 3 hours to cover a distance at a speed of 60km/hr. What distance does he cover?	32. Kanyike bought 4 cups at shs. 2,800. Find the cost of seven similar cups.

33. Study the shape below and find the value of K.



34. How many half litre cups can be used to fill a 20 litre jerrycan?

35. Study the table below and fill in the missing information.

Weeks	1	_____	6
Days	7	21	_____

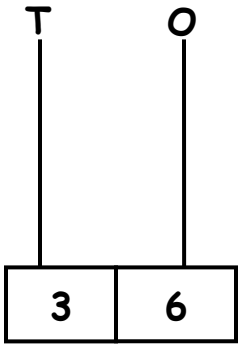
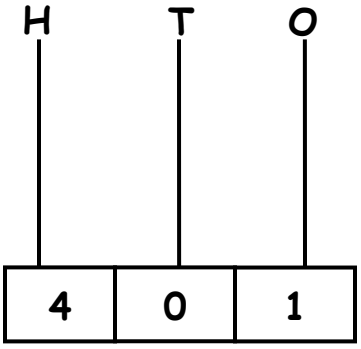
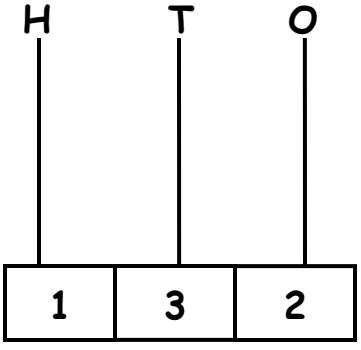
36. Write the Roman numeral for 100.

37. With the help of a sharp pencil, ruler and pair of compasses only, construct an angle of 60^0.

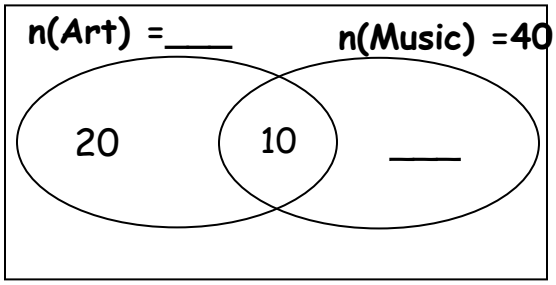
38. Sanyu bought a bag at shs. 25,000. She later sold it at shs. 28,000. Find her profit.

39. Apply BODMAS correctly; 9 x 4 + 2	40. Write the additive inverse of -12.

SECTION B (12 QUESTIONS – 60 MARKS)

33. Show these numbers on the abacus. (a) 36  	**(2 marks)**
(b) 401  	**(2 marks)**
(c) 132  	**(2 marks)**

34. Answer questions about the venn diagram below.



(a) Complete the above venn diagram. **(2 marks)**

(b) How many people enjoy both subjects? **(2 marks)**

35. Complete the table below correctly. **(6 marks)**

Mark	Frequency	Tally
70	6	𝍸 /
80	_____	𝍸 𝍸
55	2	_____
90	5 _____	𝍸

36. Use the magic square below to answer the questions that follow.

8	**a**	6
b	5	**a**
4	**d**	**e**

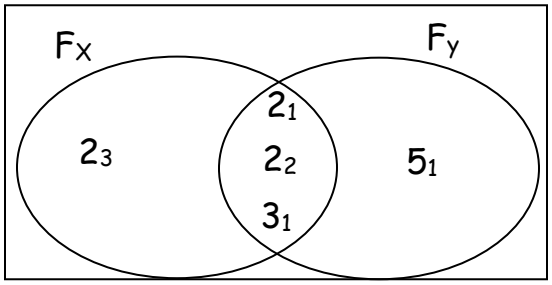
Find the unknown values. **(5 marks)**

37. In a village of 450 people, $\frac{4}{5}$ are males and the rest are females.

(c) Find the fraction of females. **(2 marks)**

(d) Find the actual number of ; (i) males	(ii) females	**(4 marks)**
38. (a) With the help of a sharp pencil, ruler and pair of compasses Construct a triangle ABC where line AB = 7cm, angle BAC = 90^0 and line AC = 5cm .		**(4 marks)**
(c)Measure line BC _____		**(1 mark)**

39. Use the venn diagram below to answer questions that follow.

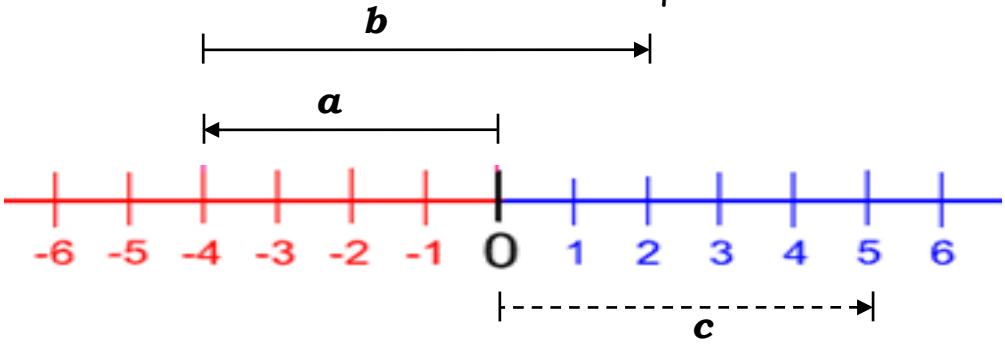


(a) Find the value of;

(i) x (ii) y **(4 marks)**

(b) Find the *G.C.F* of F_x and F_y **(1 mark)**

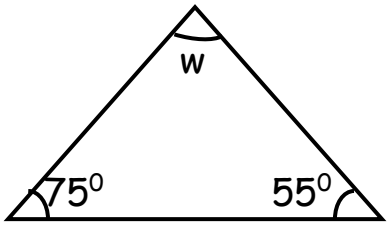
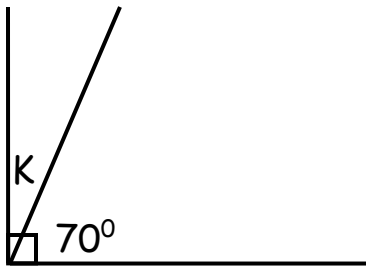
40. Use the numberline below to answer questions.

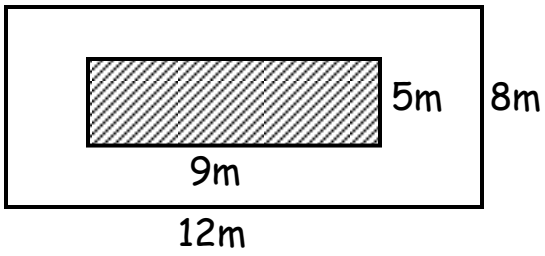


(c)Identify the integer represented by arrow;

(ii) ***a*** = _____ ***(ii)*** ***b*** = _____ ***(iii)*** ***c*** = _____ **(6 marks)**

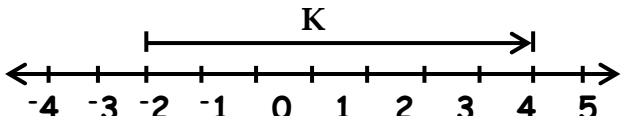
41. Ivan went to the market and bought the following items. $\frac{1}{2}$ kg of sugar at shs. 3,800 a kg. 3 bars of soap at shs. 2500 each 4 tomatoes at shs. 2,000. (a) Find his total expenditure.	**(4 marks)**
(b) If he received a change of shs. 8,600, how much money did he give the attendant?	**(1 mark)**
42. (a) Kengo had some books and was given 7 more books. If he has 13 books now, how many books did he have at first?	**(2 marks)**

(b) Given that p = 3, q = 9 and r = 2, find the value of; (iv) pqr =	**(1 mark)**
(v) $\frac{qr}{2p}$	**(1 mark)**
43. Find the unknown values in degrees. (a)  	**(2 marks)**
(b)  	**(2 marks)**

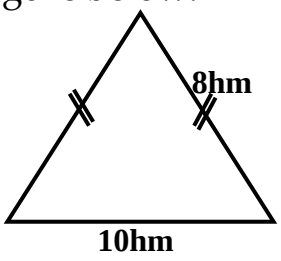
44. Kengo covered the floor using a carpet measuring 9m by 5m.  Work out the area of the; a) carpet	**(1 mark)**
b) floor	**(1 mark)**
c) uncovered part	**(2 marks)**

SET FOUR

SECTION A – (40 MARKS)

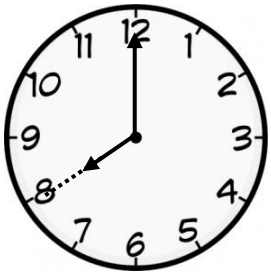
1. Divide: $4 \div 2 =$	2. Write in figures: Two thousand, four hundred sixty one.
3. Name the integer represented by the arrow marked K.  **K = _____**	4. Write down the first five even numbers.
5. Simplify: $8y + 7p – 3y + 2p$.	6. Given that A = { c , a , t} , find the number of subsets of set A.
7. Write 95 in Roman numerals.	8. The buying price of a book is sh.3000. A trader makes a profit of sh.500 on selling it. Find the selling price.

9. Calculate the perimeter of the figure below.

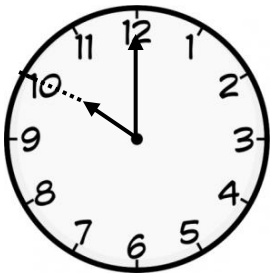


10. A game started and ended on the same day times shown on the clock face.

Started



Ended



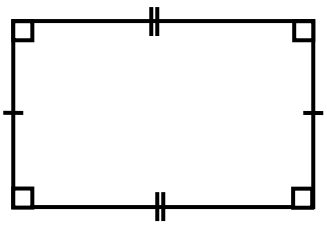
How long did the game last?

11. Work out: 9 – 10 + 11

12. Find the value of the circled digit in; 8 3 (4) 7

13. Find the average of; 93 , 90 , 82 and 95.

14. Show the lines of folding symmetry in the figure below.



15. Fill in the missing numbers in the boxes.

$$\begin{array}{r} 3\ \ 4 \\ \times 1\ \square \\ \hline 6\ \ 8 \\ +\ \square\ 4 \\ \hline 4\ 0\ 8 \\ \hline \\ \hline \end{array}$$

16. Using a pair of compasses, ruler and a sharp pencil only, construct an angle of 60^0.

17. David ate $\frac{1}{4}$ of the cake. His sister ate $\frac{2}{3}$ of the cake. What fraction of the cake remained?

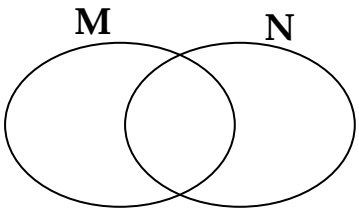
18. Given that  represents 12 trees, draw pictures to represent 60 similar trees.

19. Work out: 18.99 – 0.29

20. Find the next two numbers in the sequence.
21 , 24 , 27 , 30 , _____ , _____

SECTION B – (60 MARKS)

21. Work out: (a) 4 6 7 8 - 1 2 4 9 _____ (b) 3 0 2 x 1 4 _____ (c) $5\overline{)670}$	(2 marks@)
22.Rihana bought the following items. 3 kg of onions at sh. 2000 per kg. $1\frac{1}{2}$ kg of peas at sh. 3000 per kg. 1kg of rice at sh. 8000. (a) How much was her total expenditure?	(2 marks)
(b) If she had a fifty thousand shilling note, how much was her change?	(2 marks)

23.Given that set; M = { 0 , 1 , 2 , 3 , 4 , 5 , 6 , 7 , 8} N = { 0 , 2 , 4 , 10 , 12 , 14 } (a) Show the above sets on the venn diagram below.  	(2 marks)
(b) Find the members of set; (i) M only (ii) N ∪ M	(1 marks) (1 mark)
24.Solve: (a) y – 7 = 6 (b) $\frac{m}{3} = 30$	(2 marks) (2 marks)

25. A bus leaves Kampala for Jinja via Mukono as shown on the travel time table.

Town	**Arrival**	**Departure**
Kampala		8:00 am
Mukono	9:30 am	10:00 am
Jinja	12:00 noon	

(c) At what time does the bus;

(i) Leave Kampala (1 mark)

(ii) Arrive at Jinja (1 mark)

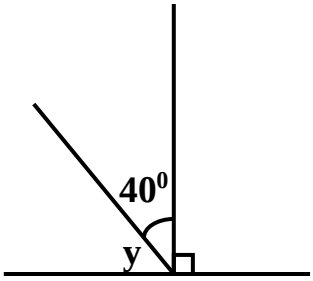
(d) How long does the bus stay at Mukono? (2 marks)

(e) Find the total time the bus spends on the whole journey. (2 marks)

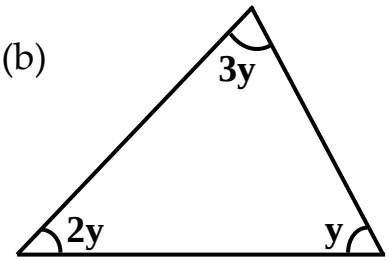
26. With the help of a sharp pencil, a ruler and a pair of compasses only, construct a regular hexagon in a circle of radius 3cm.	(4 marks)
27. Musimenta had 360 birds on her farm. $\frac{3}{5}$ were layers while the rest were broilers. (a) What fraction of the birds were Broilers?	(2 marks)
(b) How many layers were on the farm?	(2 marks)
(c) How many more layers were on the farm than broilers?	(2 marks)

28.Find the value of the unknown angles. (2 marks@

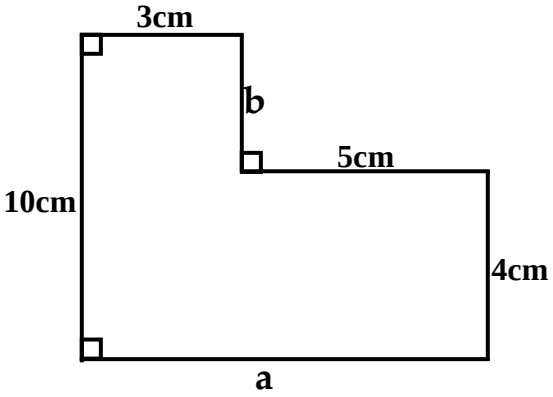
(a)



(b)



29.Study the figure below.



(a) Find the value of ;

(i) **a** (2 marks)

(ii) **b** (2 marks)

(b) Find the total distance around the figure. (2 marks)

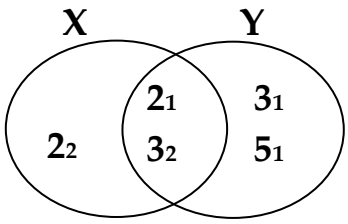
30.Work out: (2 marks@

(a) 1 0 1 **two**
\+ 1 **two**

(b) 1 0 2**five**
\- 3 4 **five**

(c) Express 12**ten** in base five. (2 marks)

31.Given the prime factors on the venn diagram below.



(c) Find the value of:

(i) X (1 mark)

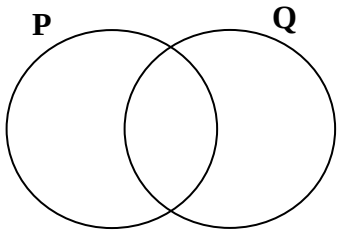
(ii) Y (1 mark)

(d)Work out the greatest common factor of **X** and **Y**. (2 marks)

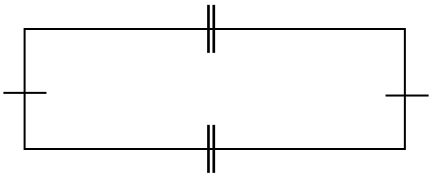
32. Magezi scored the following marks in mid-term exams. Maths 94 Science 86 SST 80 English 86 RE 44 (a) Find the average.	(2 marks)
(b) The median score.	(1 mark)
(c) The modal score.	(1 mark)
(d) The modal frequency.	(1 mark)

SET FIVE

SECTION A (20 QUESTIONS – 40 MARKS)

1. Add: 3 4 1 + 1 2 5	2. On the Venn diagram below, shade set $P \cap Q$ 
3. Find the sum of the next two numbers in the sequence. 1, 3, 6, 10, ____, _____	4. Think of a number and multiply it by four. The answer is 28. What is the number?
5. Arrange the following integers starting with the smallest. -3, 0, +4, -6, 2	6. A farmer bought a goat at shs. 105,000 and sold it at a loss of shs. 11,000. How much did he sell the goat?
7. A church service which took 1 hour and 45 minutes ended at 12:00 noon. When did it begin?	8. Find the sum of the value of 6 and the place value of 0 in the number 34106

9. How many lines of symmetry has the figure below?



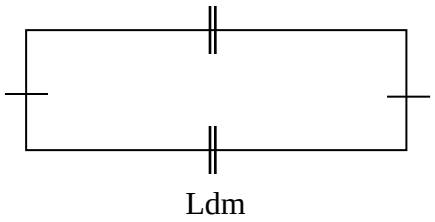
10. Suubi bought 70 dozens of pens from a whole seller. If he was given 849 pens in all, how many pens did he get free of charge?

11. Given that  represents 60 trees.

In Mr. Musoke's farm there these trees.

If each tree was bought by a timber dealer at shs. 20,000, how much money did Mr. Musoke receive?

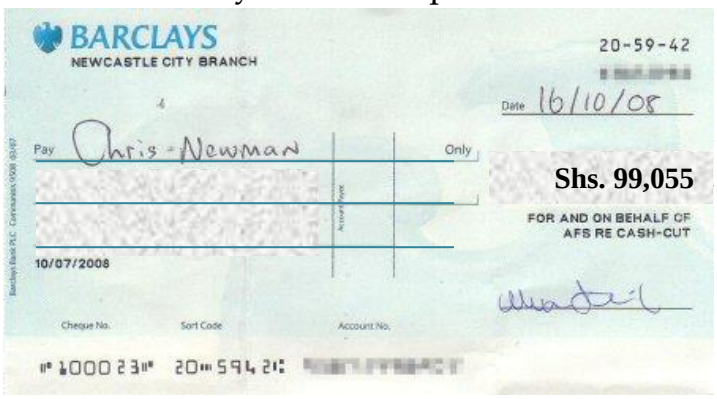
12. The perimeter of a rectangle is 40dm. If its width is 8dm, work out its length.



13. Change $3\frac{1}{3}$ to an improper fraction.

14. Muko Dairy Corporation produces 456995 litres a day and Jesa farm produces 979995 litres of milk a day. How much milk do they produce altogether in one day?

15. Write the amount of money on the cheque in words.



16. Lydia collected 80 litres of milk from her farm. How many half litre packets of milk did she collect?

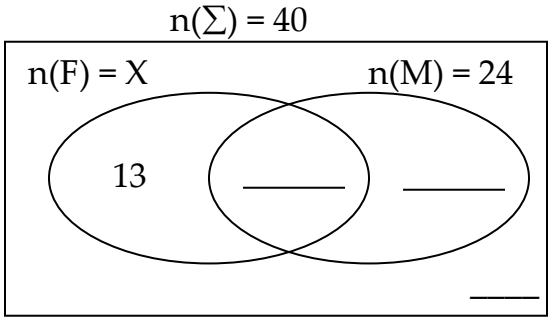
17. Nantamu obtained the following marks in a series of tests;
15, 10, 25, 15 and 20. Calculate her range of marks.

18. Find the square root of 196.

19. Rose is 7 years old. Write her age into base five.

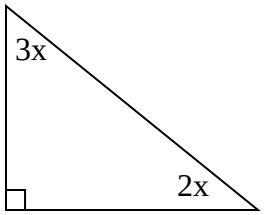
20. A plastic Coca cola bottle of soda of 500ml costs shs. 2000. What is the cost of every 2ml of that soda?

SECTION B (12 QUESTIONS – 60 MARKS)

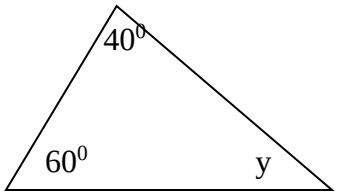
21. In a class of 40 learners, **X** like Fish (**F**), 24 like meat (**M**) and **y** learners do not like any of the two delicacies. 5 learners like both Fish and Meat. (a) Complete the above venn diagram  	**(3 marks)**
(b) Find the value of y.	**(2 marks)**
(c) What is the probability that when a leaner is picked from those 40 learners, that leaner likes only one delicacy?	**(2 marks)**
22. (a) Kamya went to the market and bought 10 goats for shs. 650,000 and 5 sheep for shs. 600,000. Which of the two types of animals was more expensive?	**(3 marks)**

23. Study the diagrams below and use them to find the values of the unknown. **(4 marks)**

a)



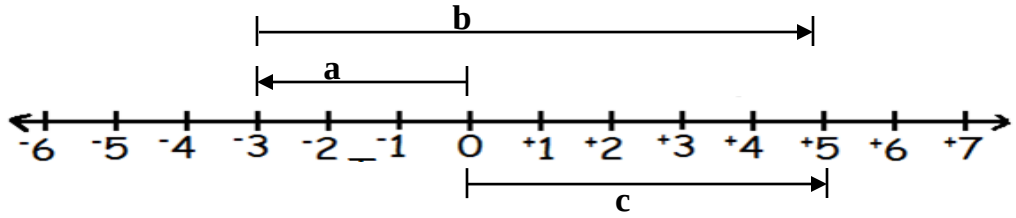
b)

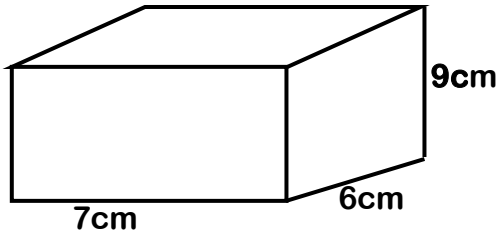


24. In a class of 240 pupils, $\frac{1}{4}$ of them are 9 years, $\frac{1}{3}$ are 10 yaers and $\frac{5}{12}$ are above 12 years. **(2 marks)**

(a) How many pupils are 10 years old?

(b) What is the difference between the number of pupils who are above 12 years and 10 years? **(4 marks)**

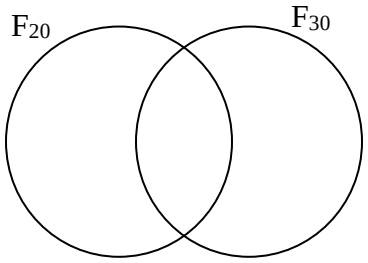
25. Study the number line and use it to answer questions.  (i) Write down the integers represented by letters on the above number line a = _____ c = _____ b = _____	**(3 marks)**
(ii) Write down the mathematical sentence.	**(2 marks)**
26. (a) Today is Monday, what day of the week will it be after 94 days?	**(2 marks)**
(b) How many weekend days shall we have had in the period stated in 26(**a)** above?	**(2 mark)**

27. (a) Using a ruler, pencil and a pair of compasses only, construct an isosceles triangle ABC such that AC = BC = 4cm and AB = 5.5cm.	**(4 marks)**
b) Measure angle ABC	**(1 mark)**
28. The figure below is of a cuboid.  (a) How many vertices does the cuboid have?	**(2 marks)**
(b) Work out the total surface area of the cuboid above.	**(3 marks)**

(c) Work out the volume of the shape. **(2 marks)**

29. Ruth was asked to prime factorise 20 and 30.

(a) Represent her answers in a Venn diagram. **(3 marks)**



(b) From the Venn diagram, find the GCF of 20 and 30 **(2 marks)**

30. (a) Given that x = 6, y = 4 and z = 3. Work out the value of **(2 marks)**

(i) 3x + z

(iii) 4(x + y)

(b) Work out $\frac{1}{3} \times \frac{1}{2}$ using a diagram. **(2 marks)**

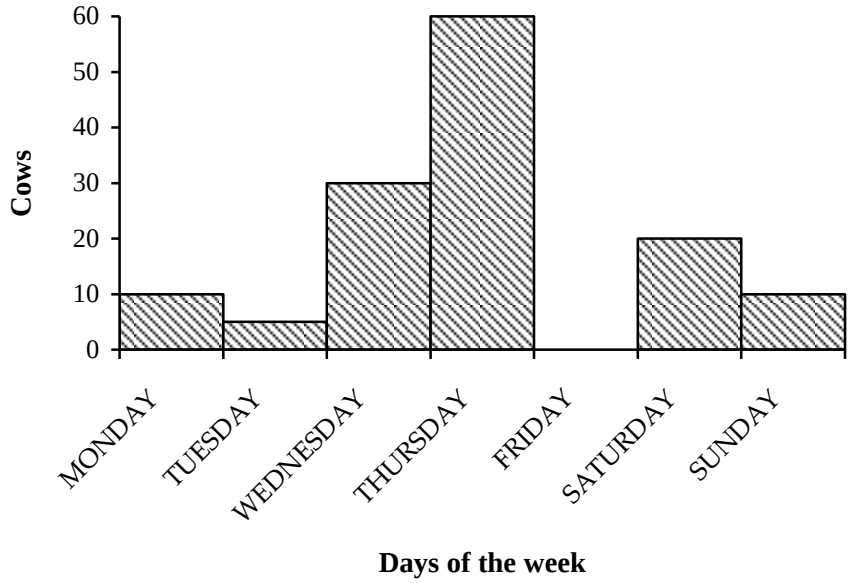
31. Below is Mr. Okanya's shopping bill. Use it to answer the questions that follow.

Item	**Quantity**	**Unit cost**	**Total**
Soap	3 pairs	Shs. _____	Shs. 2,400
Sugar	2kgs	Shs. _____	Shs. 6,400
Omo	_____ sachets	Shs. 400	Shs. 1,600
Bread	3 loaves	Shs. _____	Shs. _____
Total Expenditure			**Shs. 17,000**

(a) Fill in to complete the table. **(4 marks)**

(b) If he had gone with shs. 50,000. Calculate his balance. **(1 mark)**

32. The graph below shows the death rate of cows on a farm that had 360 cows.



(a) Which day had the highest death rate? **(1 mark)**

(b) Which day did not have any record of death? **(1 mark)**

(c) Work out the total number of cows that remained on the farm that week. **(3 marks)**

SET SIX

SECTION A:

1. Work out:
$$\begin{array}{r} 2\ 5 \\ +\ 1\ 2 \\ \hline \\ \hline \end{array}$$

2. Expand 485 using values.

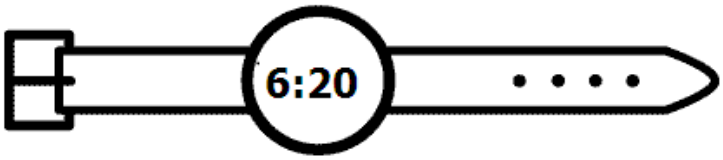
3. Using a pair of compasses, a ruler and a sharp pencil only, construct an angle Of 120^0.

4. Given that A = { a , b , c}. Find the number of proper subsets in set A.

5. Find the median of the following numbers.

   6 , 3 , 0 , 5 , 2

6. Write the morning time on the digital clock in words.



7. Convert 103_{five} to base ten.

8. Find the sum of the next two numbers in the sequence.

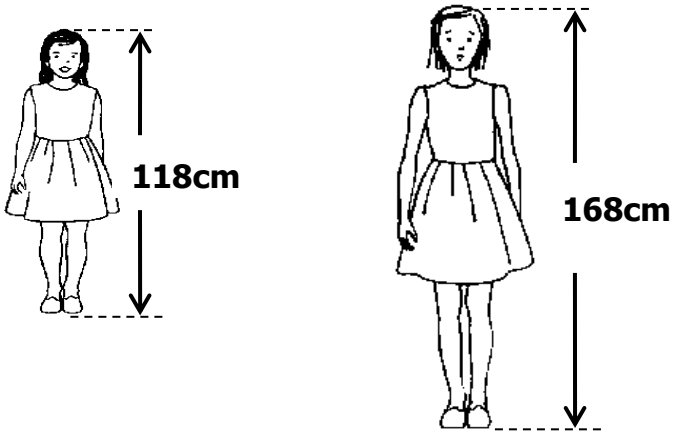
   4 , 6 , 8 , 10 , 12 , _____ , _____

9. Use a number line to work out;

   $^{-}6 + {}^{+}5$

10. Solve the equation: $2(x + 7) = 16$

11. **<u>The pictures below show the height of two girls</u>.**



Express the difference in their heights in Roman numerals.

12. Find the smallest number which can be divided by 8 or 6 and leaves 5 as the remainder.

13. Work out: $7\overline{)1414}$

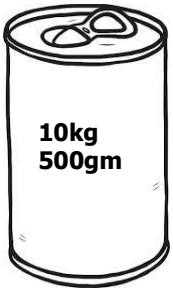
14. Given that a = 10 and b = 2. Find the value of a + (a – b)

15. A bus covered a certain distance at a speed of 80KPH in 2 hours 30 minutes. Find the distance covered by the bus.

16. Below are tins of different masses.

Tin P

Tin Q

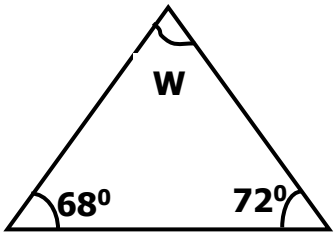


Find the total mass of the two tins in kg and g.

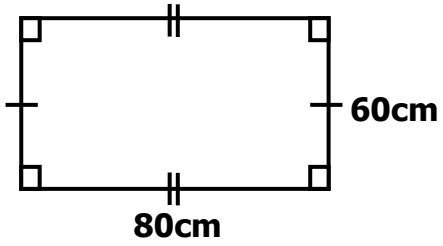
17. Betty bought a goat at sh.68, 000 and later sold it at sh.98, 000. Find the profit she made.

18. Annet had $\frac{2}{3}$ of the cake in the morning and ate $\frac{1}{4}$ of it in the afternoon. What fraction of the cake remained?

19. Find the size of the angle marked W.



20. A spider moved around the rectangular shape below twice.



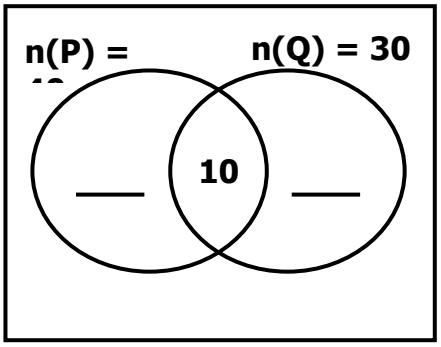
Find the total distance it covered altogether

SECTION B

21. Given that n(p) = 40, n(Q) = 30 and n(PnQ) = 10

(a) Use the information to complete the venn diagram

Σ =



(2 marks)

(b) Fin n(P $\cup$ Q) (2 marks)

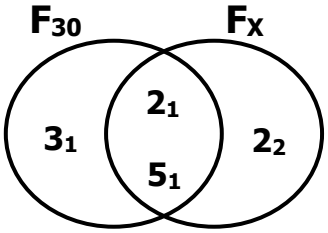
22. Given the number 8,736.

(a) Find the value of the digit in the place value of hundreds. (2 marks)

(b) Find the sum of the value of 8 and the value of 3 in the above number.
(2marks)

(c) Round off 8736 to the nearest thousands. (1 mark)

23. The venn diagram below shows the prime factors of 30 and x.



(a) Find the value of **x**. (2 marks)

(b) Find the LCM of 30 and **x**. (2 marks)

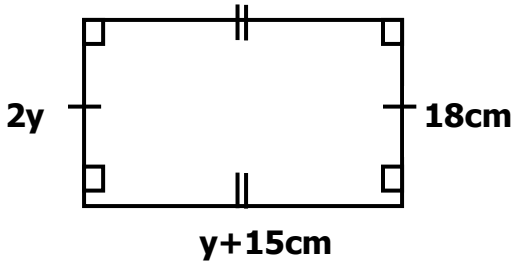
(c) Find the GCF of 30 and **x**. (2 marks)

24. Solve the following equations;

(i) $\frac{y}{12} = 15$ (2 marks)

(ii) $2m - 3 = 16$ (3 marks)

25. The figure below is a rectangle.



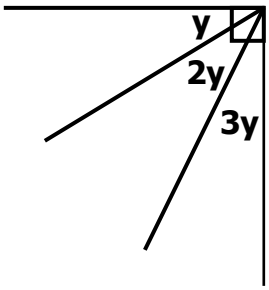
(a) Find the value of y. (2 marks)

(b) Work out the actual length. (1 mark)

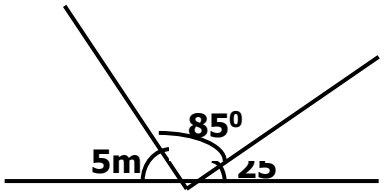
(c) Find the area of the rectangle. (2 marks)

26. Find the value of the unknown angles. (2 marks @)

(a)



(b)



27. Banza went shopping with a twenty thousand shilling note and bought the following;

2 kg of Rice at sh. 4000 per kg.

800gm of sugar at sh. 3000.

20 tomatoes at sh. 1000 for every 5.

(a) How much did he spend altogether? (4 marks)

(b) If he used Sh. 2000 for transport on boda-boda, how much money did he remain with? (2 marks)

28. In a village of 4000 people, $\frac{2}{5}$ of them are males and the rest are females.

(a) Find the fraction of females. (2 marks)

(b) How many males are in the village? (2 marks)

(c) If $\frac{3}{10}$ of the males are boys and $\frac{1}{2}$ of the females are girls, how many children are in the village. (2 marks)

29. Peter scored the following marks in 6 subjects.

50 , 60 , 40 , 75 , 85 , 60

(a) Find the range of the marks. (2 marks)

(b) What was his modal mark? (1 mark)

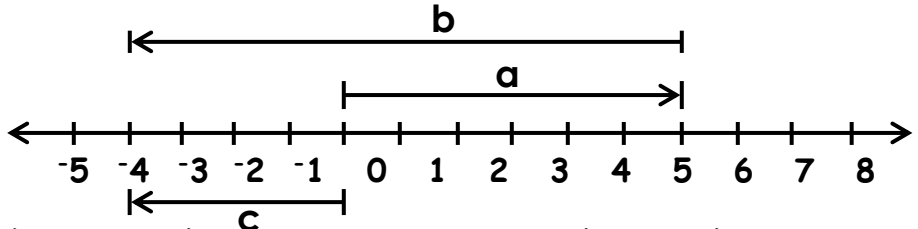
(c) Calculate his average mark. (2 marks)

30. Work out: (2 marks @)

(a) $1\ 2\ 3_{four}$
$+\ 1\ 1_{four}$
_____

(b) $1\ 0\ 1_{two}$
$\times\ 1\ 0_{two}$

31. **Study the number line below and answer questions that follow.**



(a) Write the ....eger represented by each arrow. (1 mark @)

c = _____ b = _____ a = _____

(b) Write the mathematical statement shown by the number line.

(2 marks)

32. (a) Using a pair of compasses, a pencil and a ruler only, construct a square ABCD of side 6cm. (4 marks)

(b) Measure diagonal AC. (1 mark)

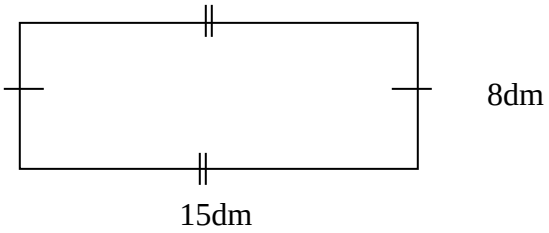
SET SEVEN

SECTION A – (40 MARKS)

1. Multiply;
   17 x 2

2. Name the set symbol;
   $\{\quad\}$

3. Maria walked round the figure below three times. Calculate the total distance she covered.

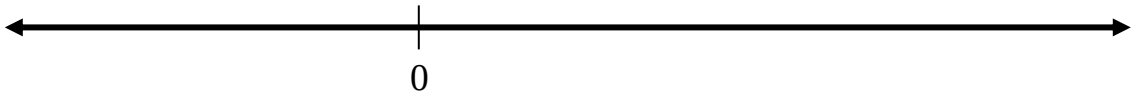


4. Find the missing number in the sequence
   10, 19, 18, 27, 26, _____

5. A primary five pupil who is in boarding spent $\frac{3}{8}$ of her day packing school items, $\frac{1}{8}$ sending goodbye messages and the remainder of the day resting. For how many hours did this pupil rest?

6. John who owns a retail shop, bought a dozen of counter books at shs. 36,000. He sold each book at shs. 4,000/=. How much profit did he make?

7. Add; -4 + 7 = _____ with the help of a well drawn number line.



8. In a class, there are 48 boys. If 12 boys were absent on Monday. Express the number of boys present in Roman numerals.

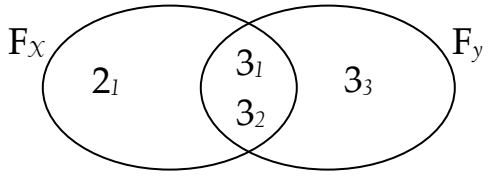
9. A bag contains 8 blue pens and 6 red pens. If a primary six boy is chosen to randomly pick a pen, what is the probability of him picking a red pen?

10. Use > , < or = to complete correctly.

$3^2 + 2^2$ _____ $3^2 \times 2^2$

11. With the help of a sharp pencil, ruler and pair of compasses only, construct an angle of 45^0.

12.Study the venn diagram below and find the LCM of F_x and F_y.



13.Change 120 minutes into hours.

14.What is the place value of 6 in 463.21?

15.Add: 3 + 4 = ____ (mod 5)

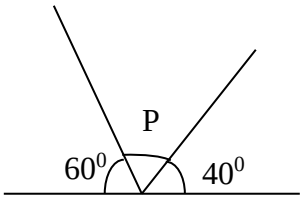
16.Apply Bodmas correctly;

$$\frac{2}{3}-\frac{5}{6}+\frac{1}{4}$$

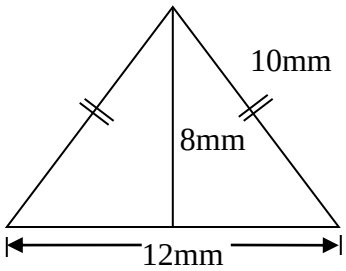
17. Given that six books cost shs. 7,200. How many similar books can one get from shs. 6,000?

18. Solve; K + K = 18

19. Find the value of P in the figure below.



20. Work out the area of the figure below.



SECTION B

21. On a farm, there are 350 animals. $\frac{3}{5}$ of them are cattle and the rest are goats.

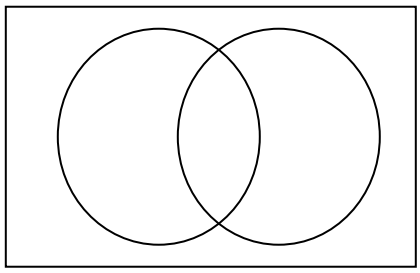
a) How many cattle are on that farm? (1 mark)

b) What fraction of the animals are goats? (2 marks)

c) How many more cattle than goats are on that farm? (2 marks)

22. In a club of 50 members, 25 play cricket (C), 33 play Hockey (H), '*x*' play both while five play other games.

a) Represent the above information on the venn diagram (2 marks)



b) How many members play both games? (1 mark)

c) How many members did not play Hockey (H)? (1 mark)

23. Makmot scored the following scores in a series of maths tests:
40, 85, 60, 55, 70

(a) Find the median score. (2 marks)

(b) Work out the range of the scores. (1 mark)

(c) Calculate the average of the scores. (2 marks)

24. (a) Find the unknown base in; $100_x = 1100_{three}$ (3 marks)

(b) The table below shows the addition operation in base six. Complete it correctly. (2 marks)

+	3	4
2	_____ six	10_{six}
5	12_{six}	_____six

25.(a) With the help of a sharp pencil, ruler and pair of compasses only, construct a triangle ABC where line AB = 6cm, line BC = 4.5cm and angle ABC = 90^0.
(4 marks)

b) Measure angle BAC _____ (1 mark)

26.Dhikula went shopping and bought the following items;
2kg of Rice at shs. 2500 per kg
1½ of meat at shs. 9,000 per kg
3 packets of Royco at shs. 1200.
500g of wheat flour at shs. 3,000 per kg.

a) Calculate his total expenditure. (1 mark)

b) If he was given change of shs. 8800, how much money did he give to the cashier? (1 mark)

27. Study the bus time table below and answer questions about it correctly.

STATION	ARRIVAL TIME	DEPARTURE TIME
KWERA		7:10am
LWERA	9:10am	9:30am
BWERA	10:30am	10:45am
NYERA	12:00midday	

a) At what time in 24 hour clock did the bus leave Kwera? (2 marks)

b) For how long did the bus stay at Bwera? (1 mark)

c) Find the total time taken by the bus to move from Lwera to Nyera? (2 marks)

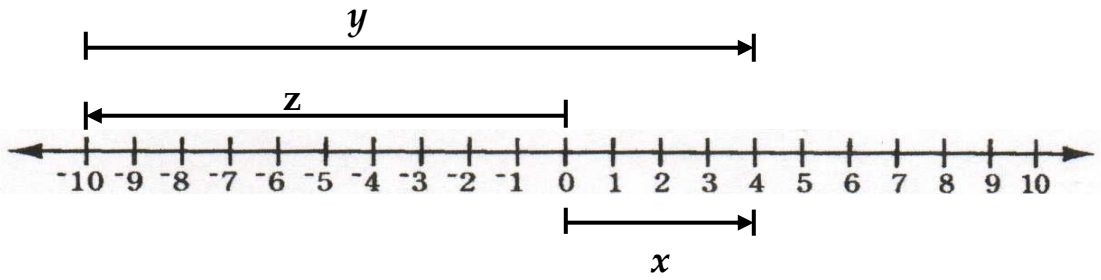
28. Given that x = 3, y = -2, and z = 5, evaluate;

(i) $y^2 + x^2$ (2 marks)

(ii) xyz (2 marks)

(iii) $\frac{4xz}{10}$ (2 marks)

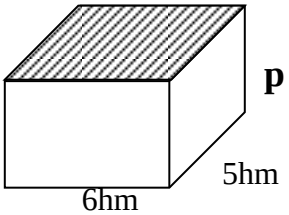
29.Study the number line below and use it to answer questions that follow;



a) Identify the integers represented by arrow; (1 mark @)

b) Write down the addition mathematical statement shown on the number line.
(2 marks)

30.The volume of a cuboid below is 120hm^3.Use it to answer the questions that follow.



a) How many faces has the cuboid above? (1 mark)

b) Find the value of **p.** (2 marks)

c) Calculate its Total Surface Area (2 marks)

31. The recently released census report showed that 6,426,013 people were in urban areas. Only 1,516,210 people were in Kampala City Authority.
(a) How many people were in other urban areas? (2 marks)

(b) If during the census each person in Kampala City authority received two stickers. How many stickers were given out altogether? (3 marks)

32. Four girls in a primary six class of Greenhill Academy were given balls by their sports teacher as shown on the graph below.

Name of girl	**Balls given**
Juliet	⚽ ⚽ ⚽ ⚽ ⚽
Joy	⚽ ⚽ ⚽
Barbra	⚽ ⚽
Cissy	⚽ ⚽ ⚽ ⚽

Scale ⚽ represents 60 balls.

a) How many balls did Juliet get? (2 marks)

b) Who got the least number of balls? (1 mark)

c) How many more balls did Cissy get than Joy? (2 marks)

SET EIGHT

SECTION A (20 QUESTIONS – 40 MARKS)

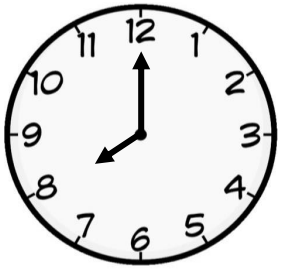
1. Take away : 9 8
   - 7 7
   _____
   _____

2. Simplify: 2k + 3p – k - p

3. Given that a = $\frac{2}{3}$ and b = $\frac{1}{4}$. Find the value of a – b.

4. Use a pair of compasses to construct an angle of 120^0.

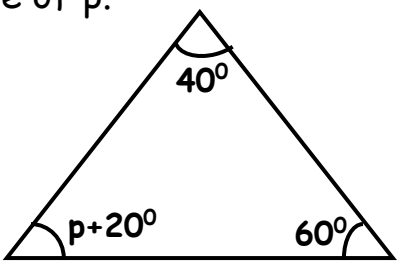
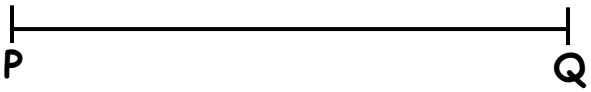
5. Nambi goes to rest at the time shown on the clock face below for 2 hours. Draw a clock face showing the time she wakes up.



6. Joan read XLIX pages of a book. How many pages in Hindu Arabic numerals did she read?

7. The sum of two consecutive numbers is 9. Find the larger number.

8. A Half kilogram of Rice costs sh.2000. What will be the cost of 2kg of similar Rice?

9. Convert $33\frac{1}{3}$ to an improper fraction.	10. Find the sum of 110_{two} and 101_{two}.
11. Given that  represents 10 books and  represents 5 books. Draw pictures to represent 85 books.	12. R = { factors of 3}. List down all the subsets of **R**.
13. In the triangle below, find the value of p.  	14. Measure the line segment below and fill in the length of PQ correctly.  PQ = _____ mm
15. Express 1342 hours in twelve clock system.	16. Write the number that has been expanded . 20000 + 600 + 7

17. Ndahura's birthday will be celebrated next week. What is the probability that the day will be starting with letter "T"?	18. A motorist covers a certain journey at 60km/hr for 3 hours 30 minutes. Calculate the distance covered by the motorist.
19. Work out: $(\frac{1}{4}$ of $\frac{1}{3}) \div \frac{1}{12}$	20. Draw a kite and indicate the line of symmetry.

SECTION B (12 QUESTIONS – 60 MARKS)

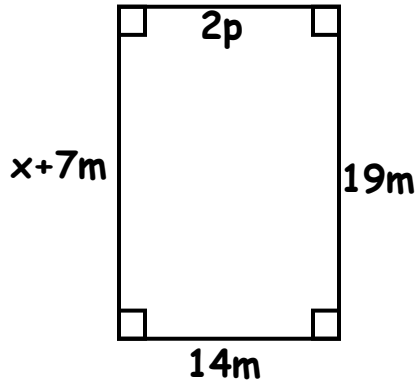
21. Ketra scored the following marks in a weekly test.

Subject	Eng	Math	Scie	SST	R.E
Marks	75	100	75	80	90

(a) Calculate the range of her scores. **(1 mark)**

(b) Find the modal mark. **(1 mark)**

(c) Calculate the average score <u>above</u> her modal mark?.	**(3 marks)**
22. a) Write the place value of 3 in 230_{five}.	**(1 mark)**
(b) Write in words 122_{three}.	**(2 marks)**
(c) Find the value of K. $21_k = 13_{ten}$	**(2 marks)**
23. In a school of 2400 pupils, $\frac{3}{8}$ of them are boys and the rest are girls. (a) Find the fraction that represents girls.	**(2 marks)**

(b) How many boys are in the school?	**(1 mark)**
(c) If $\frac{3}{5}$ of the girls are in upper school, how many girls are in lower school?	**(2 marks)**
24. ABCD below is a rectangle. Use it to answer questions that follow.  (a) Find the value of ; (i) x (ii) p	**(2 marks)**
(b) Calculate the area of the rectangle.	**(2 marks)**

(c) Find twice the perimeter of the above rectangle.	**(1 mark)**
25. Find the next number in the sequence. (a) 110 , 130 , 150 , 170 , _____ .	**(1 mark)**
(b) Calculate the square root of 196.	**(2 marks)**
(c) Work out the least common multiple of : 30 and 40.	**(2 marks)**
26. (a) Using a pair of compasses, a ruler and a sharp pencil, construct a triangle ABC such that BC – 8cm, AB – 6cm and angle ABC = 90^0.	**(3 marks)**

(b) Measure ;

(i) line AC. (ii) $\angle$BCA **(2 marks)**

27. Complete the shopping bell. **(5 marks)**

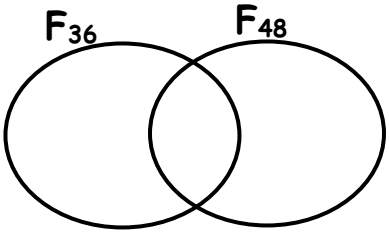
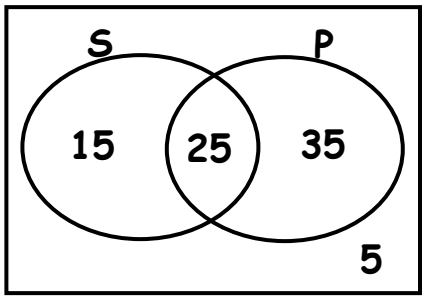
Item	**Quantity**	**Unit cost**	**Amount**
Books	$1\frac{1}{2}$ dozen	Shs.4,000	Shs. _____
Pens	_____ dozen	Shs. 9,000	Shs. 18,000
Toothpaste	3 tubes	Shs._____	Shs. 7,500
Omo	$\frac{1}{2}$ kg	Shs.8,600	Shs. _____
		Total	Shs. _____

28. Given the number 4098. **(1 mark)**

(a) Represent the number on a well drawn abacus.

(b) Round off the above number to the nearest tens. **(2 marks)**

(c) Find the sum of the place value of 4 and the value of 9 in the above number.	**(2 marks)**
29. Work out correctly. a) Hours minutes 14 42 + 12 28 b) weeks days 8 3 - 2 5	**(2 marks)**
(c) Express 96 minutes as hours and minutes.	**(3 marks)**
30. (a) A half of a number is 24. Form an equation and find the number.	**(3 marks)**
(b) What is $\frac{3}{8}$ of the same number?	**(2 marks)**

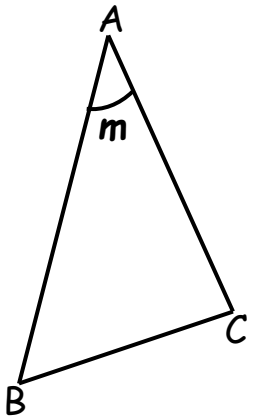
31. a) The LCM of two numbers is 24. Their GCF is 2. If one of the numbers is 8, find the second number.	**(2 marks)**
(b) Represent the Prime factors of 36 and 48 on the venn diagram.  	**(3 marks)**
32. The Venn diagram shows the number of pupils who like swimming (S) and Physical Education (P) and other sports activities. Study it and answer the questions that follow.  	
(a)How many pupils like; (i) Swimming	**(1 mark)**
(ii) Physical Education	**(1 mark)**

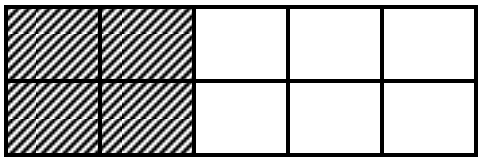
(b) How many pupils like other sports that have not been included here?	**(1 mark)**
(c)What is the probability of choosing a pupil who like sonly one game to be the group leader?	**(2 marks)**

SET NINE

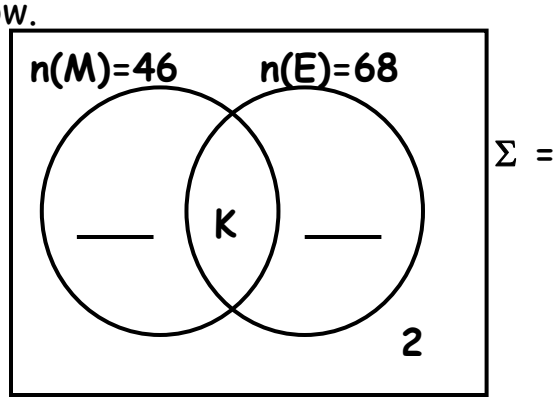
SECTION A (20 QUESTIONS – 40 MARKS)

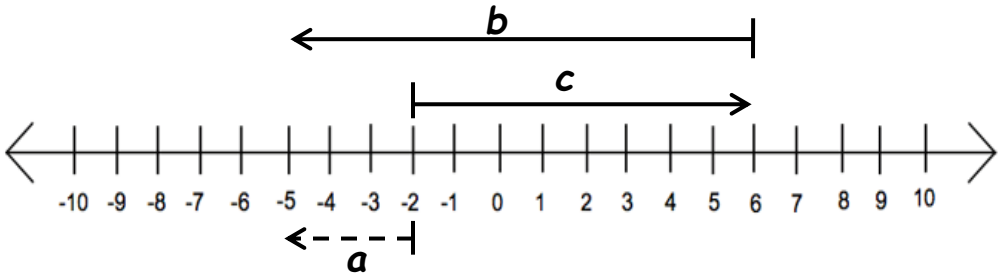
1. Multiply: 1 0 3 x 2	2. Given that; set A = { a , b , c , d , e ,f , g}. Find n(A)
3. Simplify: 5g + 8y – 3g – 5y.	**4.** Find the square root of $\frac{225}{100}$
5. Work out: $\frac{1}{4} - \frac{1}{8} + \frac{1}{2}$	6. Round off 36.495 to the nearest tenths.
7. Magara scored the following marks in tests that marked out of 50. 15 , 10 . 15 , 30 , 35 , 40. What is his median mark?	8. The area of a rectangular garden is $40m^2$. Musa walked thrice around the same garden. What distance did he cover if the length is 8m?
9. Add: Hours minutes	10. Using a ruler, a sharp pencil and

3 4 6 + 2 2 4 _____ _____	pair of compasses only, construct an angle of 120^0 in the space below.
11. Find the next number in the sequence below. 22 , 15 , 9 , 4 , 0 , _____	12. Subtract; $^-9 - ^-10$
13. Mukose was given shs.25000 to go to the shop and buy the following items. 2 geometry sets at shs.5000 a set. $1\frac{1}{2}$ kgs of meat at shs.8000 a kilo. How much change did he get?	14. The figure below shows triangle ABC such that Angle $\angle B = 75^0$, angle $\angle C = 45^0$. Find the value of ***m***. 
15. Set K has 5 elements. How many	16. What percentage of the figure

proper subsets can be formed from set K?	below is Unshaded? 
17. Barigye's daughter ate $\frac{1}{3}$ of the cake on Monday and $\frac{1}{4}$ of the cake on Thursday. What fraction did she eat in two days?	18. If △ represents 19 triangles, draw the pictures to represent 95 triangles.
19. The bus covered a distance of 120km at a speed of 40km/hr. How long did the bus take to cover the distance?	20. Change 341_{five} to base ten.

SECTION B (12 QUESTIONS – 60 MARKS)

21. In a class of 100 pupils , 46 like Music (M) , 68 like English (E) and 2 like neither of the two subjects. If K pupils like both subjects, (d) Represent the above information on the Venn diagram below.  	**(3 marks)**
(e) How many pupils enjoy both subjects?	**(2 marks)**
22. a) Simplify: $1 - \frac{4}{8}$	**(2 marks)**

(b) In a school of 3500 pupils, $\frac{3}{5}$ of them are in the nursery section and the rest are in the primary section. How many pupils are in the primary section?	**(3 marks)**
23. Use the number line below to answer the questions that follow.  (a)Write the integers represented by each arrow. (i) a = _____	**(1 mark)**
(ii) b = _____	**(1 mark)**
(iii) c = _____	**(1 mark)**
(b) Write the mathematical statement shown on the number line above.	**(2 marks)**
24. Musa and Peter set alarms in their phones to wake	**(5 marks)**

them up. Musa's phone made an alarm every after 20 minutes and Peter's phone made an alarm every after 30 minutes. If they made alarms together at 4:30a.m, at what time did their watches make alarms together again?

25. The table below shows the number of children who were immunised at Mbale Hospital against measles.

Days	**Mon**	**Tue**	**Wed**	**Thur**	**Fri**	**Sat**	**Sun**
No.of children	50	30	70	150	60	90	110

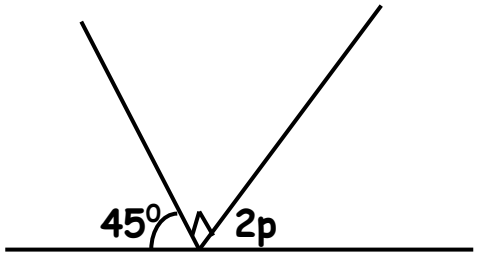
(a) On which day was the highest number of children immunised? **(1 mark)**

(b) How many more children were immunised on Saturday than Wednesday? **(2 marks)**

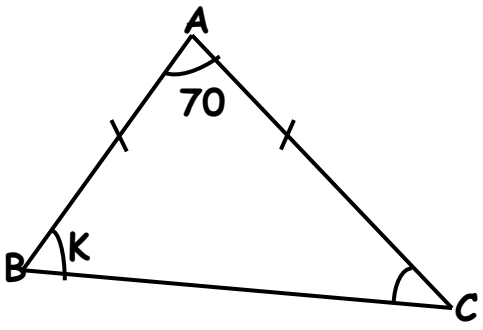
(c) Calculate the average number of children immunised on a **(2 marks)**

daily basis.

26. Find the value of the unknown angles in the figures below.

(a) 

(3 marks)

(b) 

(2 marks)

27. (a) Solve: 2 (16 + h) =108 **(2 marks)**

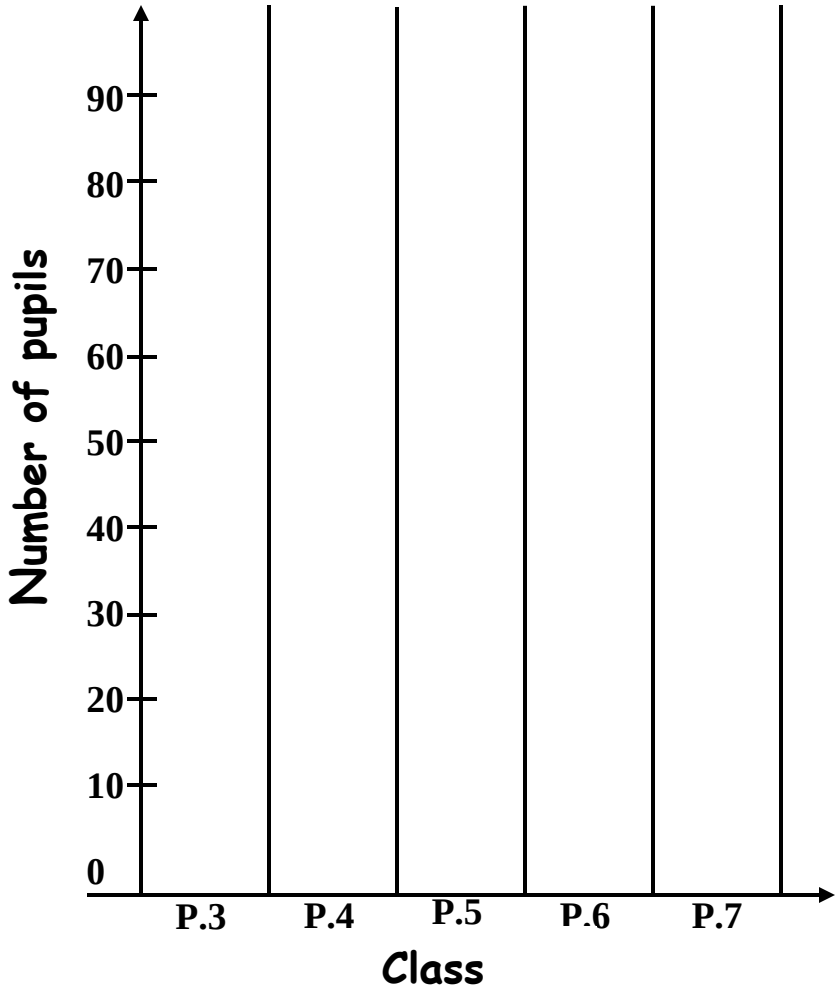
(b) Matte is 4 years older than Musse. If their total age is 102 **(3 marks)**

years. How old is Matte?	
28. Use a pair of compasses, ruler and sharp pencil only to construct a triangle GEF in which EF = 7cm , angle GEF = 30^0 and angle EFG = 128^0.	**(4 marks)**
(b) measure $\overline{GF}$	**(1 mark)**
(c) Measure ∠EGF.	**(1 mark)**
29. Find the product of the value of 6 and the place value of 9	**(2 marks)**

in 846392.	
(b) Expand 1634.68 using exponents.	**(1 mark)**
(c) Write 803008 in words.	**(1 mark)**
30. Kabanda went to DFCU bank and withdrew a bundle of bank notes numbered from GH 0012349 to GH 0012450. (a) How many notes did he withdraw from the bank?	**(2 marks)**
(b) If he withdrew fifty thousand shilling notes, how much money did he withdraw?	**(3 marks)**
31. The table below shows the number of children at Katinti	**(5 marks)**

Primary school. Use the table to represent the information on a bar graph.

Class	P.3	P.4	P.5	P.6	P.7
Number of pupils	45	50	80	70	50



32. (a) The sum of three consecutive odd numbers is 135. What are the numbers?	**(3 marks)**
(b) Find their range.	**(2 marks)**

SET TEN
SECTION A:

1. Add: 3 4

   + 2 1

   _____

2. P = {all vowels}, find n(P).

3. Simplify 4y – 3y + y.

4. Write 95 in Roman numerals.

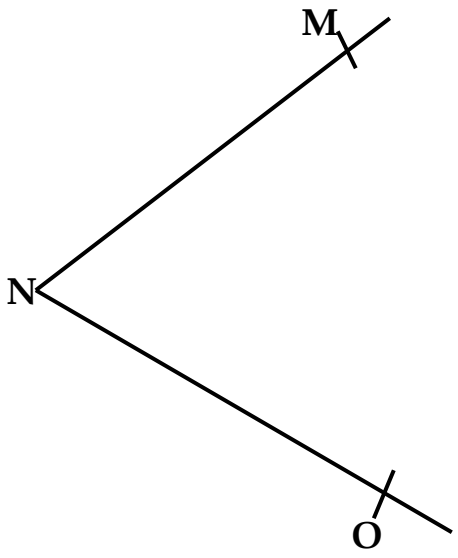
5. Simplify: $\bar{3} - \bar{5}$

6. What is the value of 9 in 92675?

7. Find : $\frac{3}{4}$ of $\frac{1}{9}$

8. I think of a number, multiply it by 2 and add 6. The result is 40. What is the number?

9. Using a pair of compasses, a ruler and a sharp pencil, bisect angle MNO.



10. Mukiibi bought a pair of trousers at sh. 45,000. He later sold it and made a loss of sh. 7500. At what price did he sell the pair of trousers?

11. Change 212_{five} to base ten.

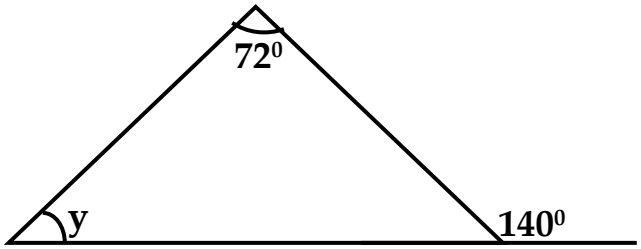
12. Fill in the missing number in the sequence.

    1 , 4 , 9 , 16 , _____

13. Kalita bus covered a distance of 360km at a speed of 90km/hr. Find the time taken by the bus to cover the journey?

14. Express 12 metres as centimeters.

15. Find the missing angle marked **y**.



16. Express 3:40pm in 24 hour clock system.

17. Write 694 in scientific notation.

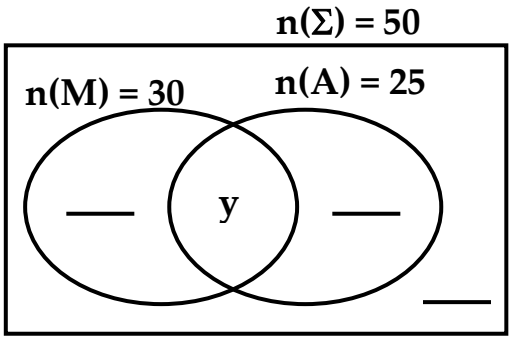
18. Divide: 5055 by 5

19. In a class of 45 pupils, 26 are girls and the rest are boys. What fraction of the class are boys?

20. Betty used half-litre bottles to fill a tank with a capacity of 40 litres. How many half-litre bottles did she use to fill the tank?

SECTION B:

21. a) In a class of 50 pupils, 30 like Music (M) , 25 like Art (A) , **y** like both subjects while 3 like other subjects. Use the information to complete the venn diagram below.



b) How many pupils like both subjects?

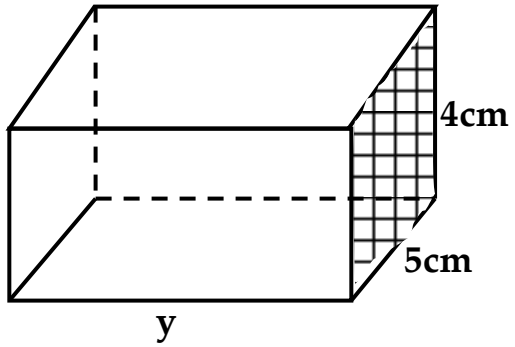
c) Find the probability of randomly choosing a pupil who likes other subjects.

22. The sum of 3 consecutive even numbers is 54. If the first number is x.

a) Find the value of x.

b) Find the numbers.

23. <u>The figure below is a rectangular prism.</u>



a) Find the area of the shaded part.

b) If the volume of the figure above is 120cm³, find the value of **y**.

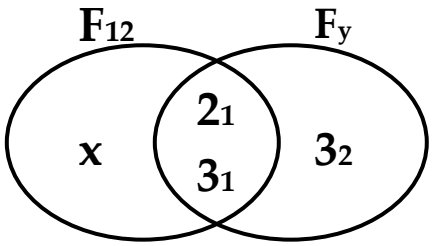
24. Joan scored the following marks in a series of tests.

80 , 70 , 40 , 60 , 40

a) Find the mode.

b) Find the average mark.

25. <u>Study the venn diagram below and answer the questions that follow.</u>



a) Find the value of; (i) x | (ii) y

b) Find the GCF of 12 and **y**.

c) Find the LCM of 12 and **y**.

26. In a group of 700 members, $\frac{2}{7}$ of them are males and the rest are female.

a) Find the fraction of the females.

b) If $\frac{1}{2}$ of the males are boys and $\frac{1}{5}$ of the females are girls. How many children are in the group?

27. Elson bought the following items.

3kg of onions at sh. 2000 per kg.

$1\frac{1}{2}$ kg of beans at sh. 3000 per kg.

2 kg of meat at sh. 18000.

a) How much was his total expenditure?

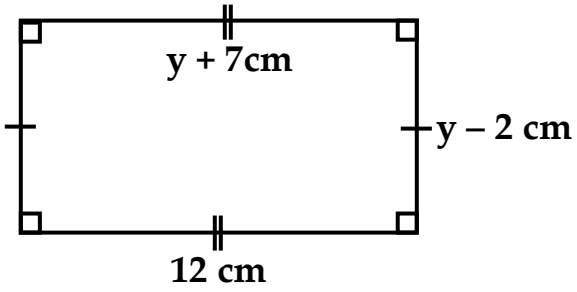
b) If he had only one note of sh. 50,000, how much money did he remain with?

28. a) Using a pair of compasses, a ruler and a sharp pencil, construct a triangle ABC such that BC = 6cm, $\angle ABC = 45^0$ and $\overline{AB} = 5cm$.

b) Measure length AC.

_____

29. **<u>Study the diagram below and answer questions that follow</u>**.



(a) Find the value of y.

(b) Find the actual width.

(c) Calculate the area of the figure above.

30. The lower and upper primary school bells ring at intervals of 30 minutes and 40 minutes respectively. They ring together at 10:00 am.

(a) After how many minutes will they ring together again?

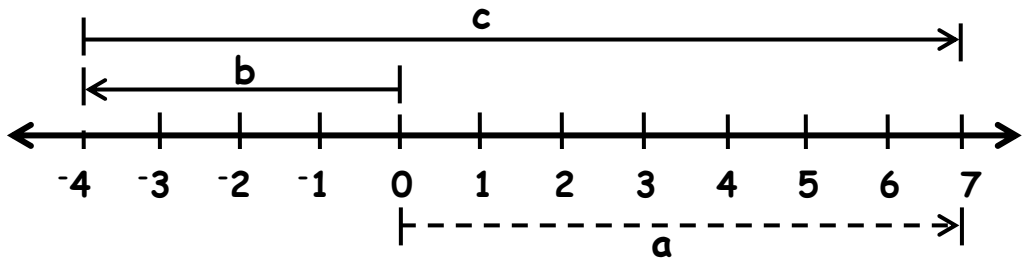
(b) At what time will the two bells ring together again?

31. Work out:

(a) $\frac{3}{4} - \frac{2}{3} + \frac{1}{4} =$

(b) $1\frac{1}{7} \div 2\frac{1}{3} \times 1\frac{1}{6} =$

32. <u>Study the number line below and use it to answer questions that follow.</u>



(i) Write the integers for;

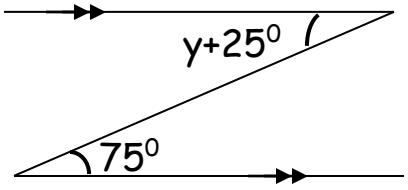
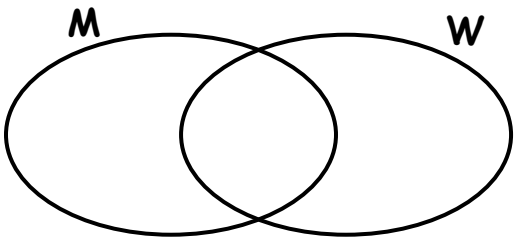
a = _____ **b** = _____ **c** = _____

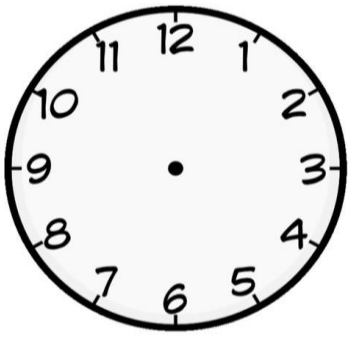
(ii) Write the mathematical statement shown on the above number line.

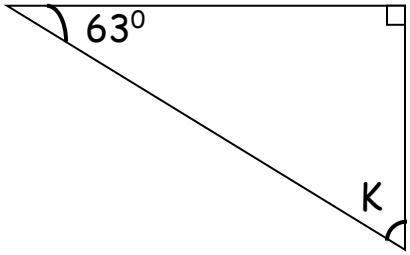
SET ELEVEN

SECTION A (20 QUESTIONS – 40 MARKS)

1. Write 426 in words.	2. Write 43 in Roman Numerals.
3. Find the unknown index in; $2^{x+1}=8$	4. One Us dollar ($1) is equivalent to Ush. 3450. How many dollars can you get from Ush. 17,250?

5. With the help of a pencil, ruler and pair of compasses, construct an angle of 45^0	6. Find the missing two numbers in the sequence. 2, 4, 7, 11, ___, ___
7. The temperature of a pawpaw was measured as 15^0C . When the pawpaw was put in the refrigerator, the temperature dropped by 9^0C. Find the new temperature of the pawpaw.	8. Study the diagram below and find the value of y in degrees. 
9. Shade set W on the venn diagram below. 	10. Write 1269 in standard form.

11. Four fountain pens cost shs. 10,000. How many similar fountain pens can one buy with shs. 7500?	12. Write 0.2424……. as a recurring decimal.
13. Show 9:30 on the clock face below.  	14. Convert 108km/hr to m/s.
15. Solve the inequality; $2x - 2 \geq 6$	16. Expand 438 using values.

17. Betty bought a dress at shs. 6,000 and sold it at shs. 7200. Calculate percentage profit.	18. Change $1200cm^3$ to litres.
19. Express 1 hour as a ratio to 40 minutes.	20. Find the value of **K** in degrees. 

SECTION B (12 QUESTIONS – 60 MARKS)

21. (a) Match correctly.	**(4 marks)**

One hundred nineteen	123_4
Twenty eight	119
Two thousand seventy	28
One two three base four	2070

22. The table below shows marks scored by P.6 pupils in a mathematics test.

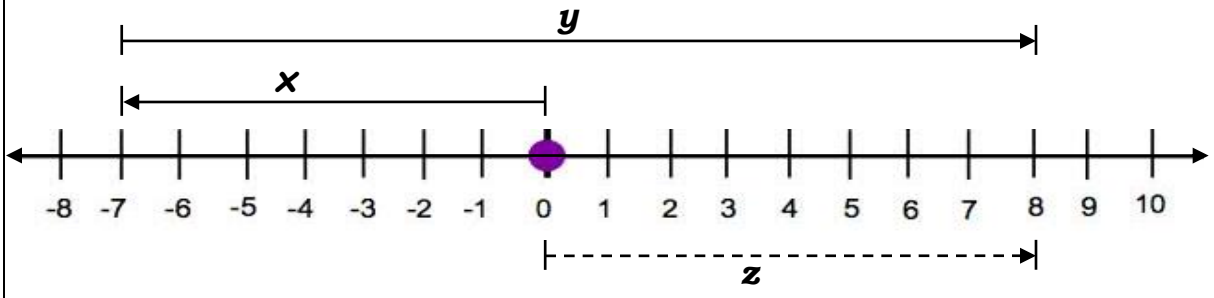
Marks	60	30	40	80	90
Number of pupils	2	1	2	3	2

(a) How many pupils did the test? **(2 marks)**

(b) What is the modal mark? **(1 mark)**

(c) Calculate the mean mark. **(3 marks)**

23. Use the numberline below to answer questions that follow.



(iii) Write the integer represented by each arrow. **(3 marks)**

(a) x = _____ (b) y = _____ (c) z = _____

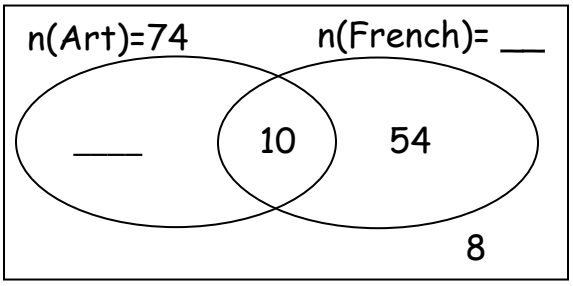
(iv) Write the addition mathematical statement shown above. **(2 marks)**

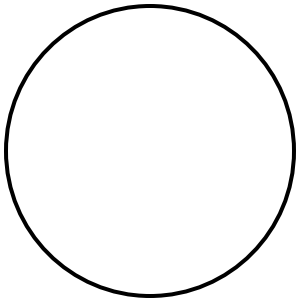
24. Complete the shopping bill below. **(4 marks)**

Item	**Quantity**	**Unit Cost**	**Total Cost**
Sugar	3kgs	Shs. 3,200	Shs. _____
Soap	_____ bars	Shs. 2,800	Shs. 5,600
Meat	2kgs	Shs. 8,000	Shs. _____
TOTAL EXPENDITURE			Shs. _____

25. (a) With the help of a sharp pencil, ruler, and pair of compasses, construct a triangle PQR where line QR = 6cm, angle PQR = 90^0, and angle QRP = 30^0, **(4 marks)**

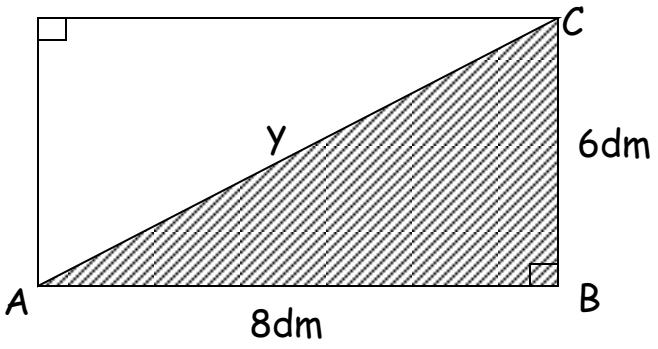
(b) Measure line PQ _____	**(1 mark)**
26. The sum of three consecutive whole numbers is 15. (a) Find the actual numbers.	**(4 marks)**
(b) Find their range	**(1 mark)**
27. (a) Simplify; $\frac{3.6 \times 6.4}{0.024 \times 1.2}$	**(3 marks)**

(b) Apply BODMAS to work out; $\frac{5}{6} - \frac{3}{4} \div 1\frac{1}{2}$	**(2 marks)**
28. The venn diagram below shows the number of pupils who attended lessons in different subjects in a week.  a)Complete the above venn diagram.	**(2 marks)**
b) How many pupils are in that class altogether?	**(2 marks)**

29. (a) Amanda has shs. 20,000. She wants to buy a toy that costs shs. 5,000. What fraction of her money will remain after buying the toy?	**(3 marks)**
(b) What fraction of her money would she use if she bought two toys?	**(2 marks)**
30. The circle drawn below has a diameter of 14cm. (not drawn on scale)  (a) Find its circumference.	**(3 marks)**

(b) Calculate the area of the circle above.	**(3 marks)**
31. (a) Convert 23_{five} to base eight.	**(3 marks)**
(b) Find the unknown base in; $104_n = 29_{ten}$	**(3 marks)**

32. Study the geometric shape below and answer the questions that follow.



(a) Find the measurement of line AC. **(3 marks)**

(b) Work out the perimeter of the shaded figure. **(2 marks)**

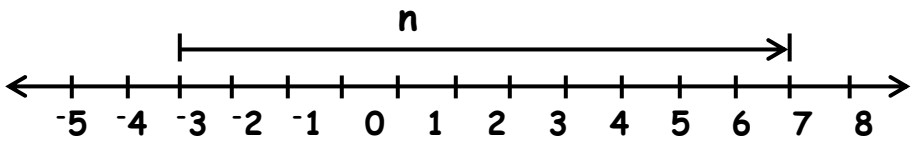
SET TWELVE

SECTION A:

1. Multiply: 13 x 3

2. Write 428 751 in words.

3. Name the integer represented by the arrow marked **n**.



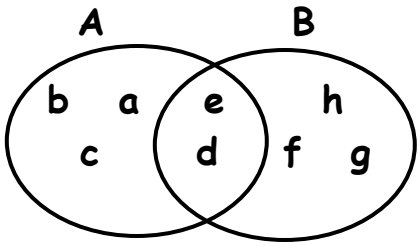
n = _____

4. Find the square root of 144.

5. Given that y = 12, t = 8 and p = 5.

   Find the value of $\frac{y-t}{p}$

6. Study the Venn diagram below.



List members of A'

7. Express 49 in Roman numerals.

8. Given that 1 USA dollar is equivalent to Ugshs 3500. How many USA dollars can one get from Ugshs 63000?

9. Taking pi as $3\frac{1}{7}$, find the circumference of a circle whose radius is 14cm.

10. Express 20mls to km/hr.

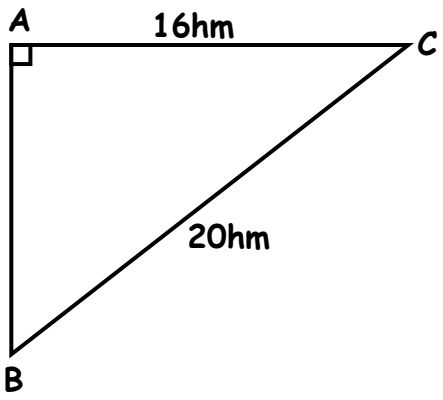
11. Kenedy saved shs 360,000 in centenary bank which offered him an interest rate of 10% p.a for 2 years. How much money did he have altogether after 2 years?

12. Find the expanded number in;

$(9 \times 10^{2}) + (7 \times 10^{1}) + (2 \times 10^{0}) + (1 \times 10^{-1})$

13. Work out the range in; 12 , 2 , 4 and 8.

14. Study the diagram below and find the measurement of line AB.



15. A man is 18 years older than his wife. If their total age is 68 years, how old is the man?

16. The interior angle of a regular polygon is 140^0. Find its exterior angle.

17. Work out: $a^7 \div a^2$

18. Mother had 18 blue pens and 12 green pens in a packet. She picked at random and gave her son one pen. What is the probability that she gave her son a blue pen?

19. 7 men working at the same rate can take 6 days to finish a certain task. How many days will 3 men working at the same rate take to finish a similar task?

20. Without using direct division, show that 315 is completely divisible by 3.

SECTION B: (60 MARKS)

21. Work out;

(a)
$$\begin{array}{r} 8\,7\,9\,3 \\ +\,4\,1\,4\,4\,8 \\ \hline \\ \hline \end{array}$$

(b)
$$\begin{array}{r} 4\,0\,4\,0 \\ \times\quad 1\,2 \\ \hline \end{array}$$

22. A maid went to the shop with a fifty thousand shilling note and bought the following items.

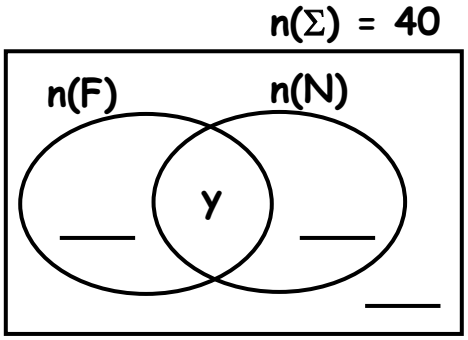
Item	**Quantity**	**Unit cost**	**Amount**
Fountain pen	2	Shs 8000	_____
Sugar	_____ kg	Shs 5000	Shs 5000
Milk	$2\frac{1}{2}$ litres	_____	Shs 6000
Total expenditure			_____

(a) Complete the table above.

(b) Work out the change that was given to the maid.

23. In a class of forty pupils, 30 like Football (F), 12 like Netball (N) , y like both games and two like neither of the games.

(a) Complete the venn diagram using the given information.



(b) How many pupils do not like Football?

24. Matata left home at 7:00am for town A at a speed of 120km/hr reaching there at 9:00am.

(a) For how long did he move?

(b) How far is his home from town A?

25. Solve these equations.

(i) $\frac{n}{2} - 3 = 5$

(ii) 2 (x – 1) = 12

26. With the help of a sharp pencil , ruler and pair of compasses only;

(a) Construct a triangle PQR where angle PQR = 120^0, line PQ = 4cm and line QR = 6.5cm.

(b) Measure; (i) angle QRP _____

(ii) line PR = _____

27. Simon, Solomon and Sarah shared shs 45000 in the ratio of 2 : 5 : 3 respectively.

(a) Find the share of;

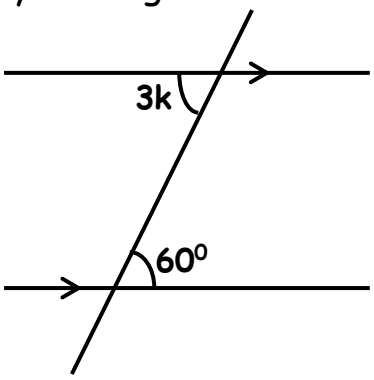
(i) Solomon

(ii) Sarah

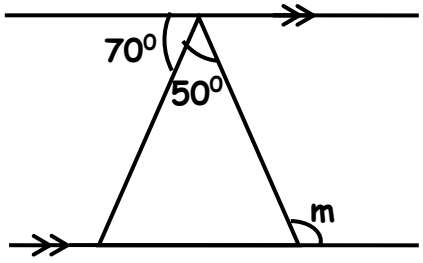
(b) Express the amount of Simon as a percentage of the total share.

28. Study the figures below and find the unknowns in degrees.

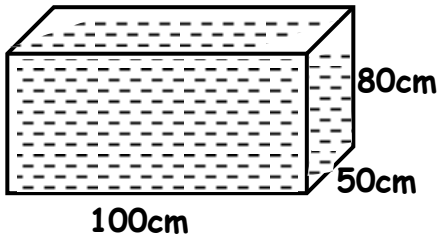
(a)



(b)



29. Study the tank below and use it to answer questions that follow.



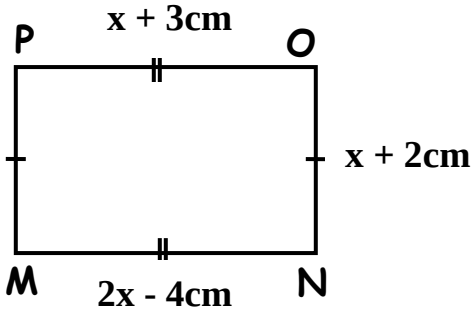
(a) Find the volume of the tank below.

(b) How many litres of water can make the tank to be <u>half</u> full?

30. Simplify: (a) $\frac{4.8x0.12}{0.6x0.08}$

(b) $\frac{200}{300}$ to its lowest terms.

31. Given that line MN = 2x – 4cm, line NO = x + 2cm and line PO = x + 3cm.

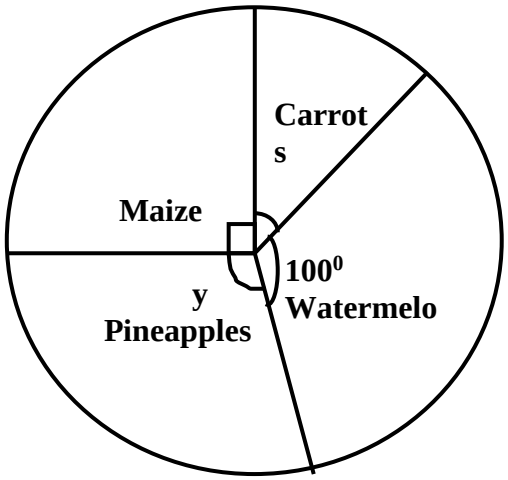


(a) Find the value of x.

(b) Find its actual length.

(c) Work out the area of the above rectangle.

32. The pie-chart below shows the farmers who sold their products at a trade show.



(a) Find the value of y.

(b) If 108 farmers sold maize, find the total number of farmers who sold at the trade show.