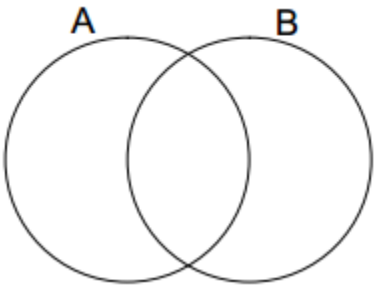
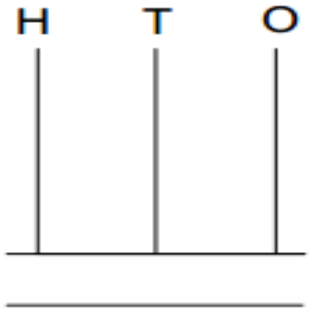
SECTION A

1. Add: 12 + 8
2. Find the next number in the sequence

   2, 3, 5, 7, ……
3. What is $\frac{1}{2}$ of 24?
4. Convert 3m to cmm
5. Add: $21_{five} + 14_{five}$
6. Shade set B.

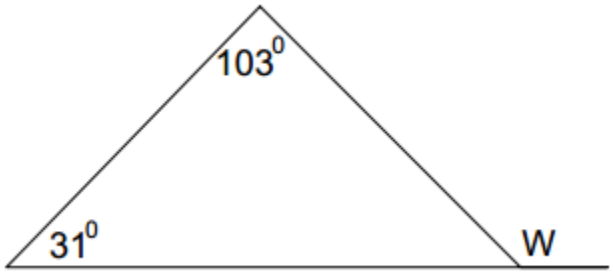


7. Simplify: 2p – 3p + 4p
8. Work out: $^{-}4 + ^{-}2$
9. Show 316 on the abacus

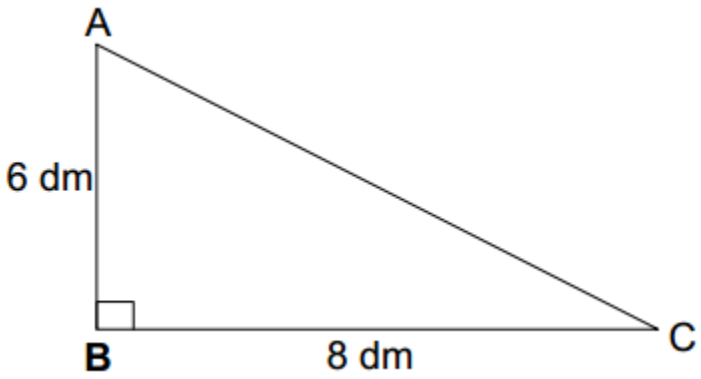


10. Musoke covers a distance of 25km in 30 minutes. Calculate his speed in km/hr.
11. Omut scored 16 marks out of 20. Calculate his mark as a percentage.
12. Isma scored 21 goals in a particular soccer encounter. If Damalie scored 12 goals, find the range of their scores.

13. What is the size of the angle marked W?



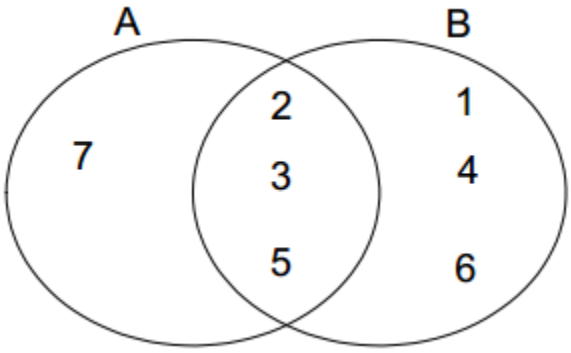
14. Find all the prime factors of 30
15. Solve: $2(p - 3) = 0$.
16. Calculate the area of triangle ABC below.



17. The chance that the queen visits Uganda again $\frac{2}{7}$. Find the chance that she does not visit Uganda again.
18. The ratio of Namu's milk to that of Bagaga is 2:3 respectively. If Namu has 6 litres of milk, how many litres of milk has Bagaga?
19. Solve for y: $2y - 8 \leq y + 2$
20. Jane is 9 years old and Peter is 2 years older than Jane. Find their mean age.

SECTION B.

21. Use the venn diagram below to answer the given questions.



i) Find set A. (1 mark)

ii) Find n(AuB) (2 marks)

iii) Name set A (2 marks)

iv) Name set B (1 mark)

22. Using a ruler and a pair of compasses only, construct a regular hexagon of side 4 cm. (3 marks)

b) calculate its perimeter. (2 marks)

23. In a class of 42 pupils, $\frac{2}{3}$ of them are girls and $\frac{1}{4}$ of the goals are boarders

i) Find the fraction for boys (1 mark)

ii) How many pupils are boys? (2 marks)

iii) How many girls are boarders? (2 marks)

24. The interior angle of a regular polygon is 36^0 more than the exterior angle.

i) Find the exterior angle. (2 marks)

ii) Name the polygon (1 mark)

iii) Calculate the interior angle sum. (2 marks)

25. Use the number 3,418 to answer the following;

a) What is the place value of 4? (1 mark)

b) Find the value of 4. (2 marks)

c) write the number in the expanded notation using powers of ten. (2 marks)

26. a) Remove the brackets and simplify. (3 marks)

8(m - 1) + 3(m + 2)

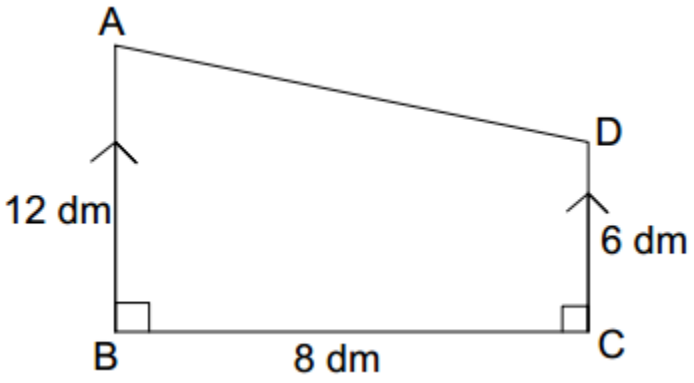
b) Solve: $\frac{2}{3}(12y - 9) = 18$ (3 marks)

27. Juma bought a goat at shs. 142,000 and later sold it a profit of 10%

i) Find the profit (2 marks)

ii) Calculate the selling price (2 marks)

28. Use the diagram below to answer the questions that follow.



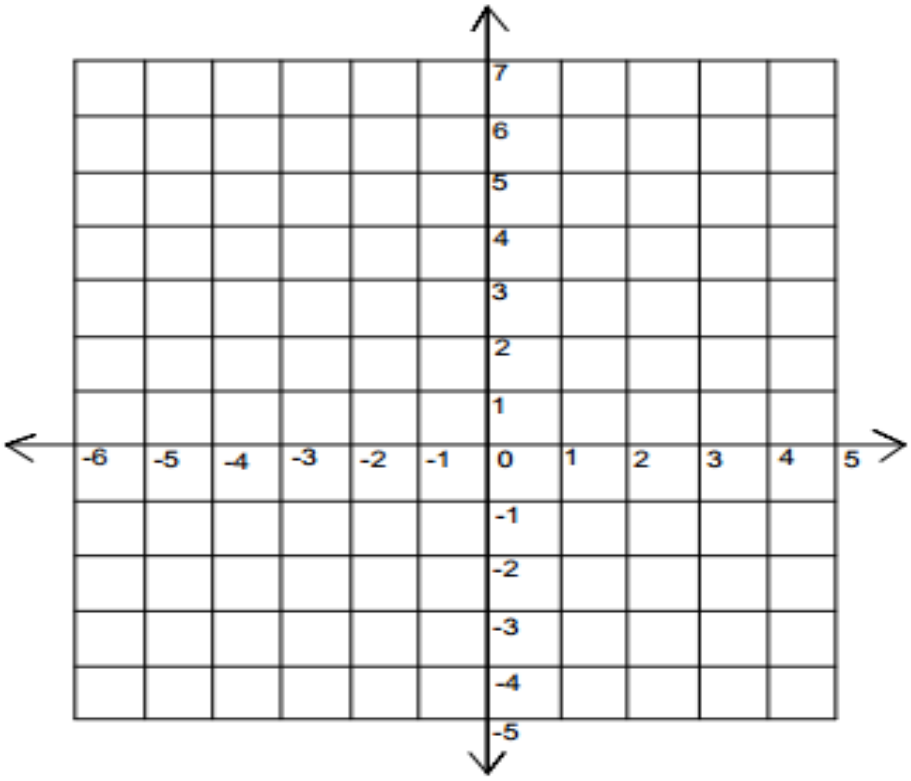
a) Find length AD (3 marks)

b) Calculate its perimeter (2 marks)

29. Plot the following points on the grid given. (3 marks)

A(-3, +3), B(-3, -3), C(+4, -3).

Join A to B, B to C , C to A



i) Name the shape formed. (1 mark)

ii) Find the length of BC in units. (1 mark)

30. Kato went to a shop with shs 20,000 and bought the following;

3 loaves of bread at shs 3500 each loaf

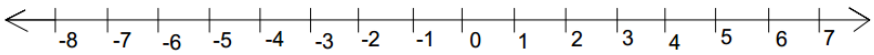
3 litres of milk at shs. 5400.

$\frac{1}{2}$ kg of blue band at shs 3200 each kg.

a) How much did Kato use altogether? (4 marks)

b) Find Kato's balance. (1 mark)

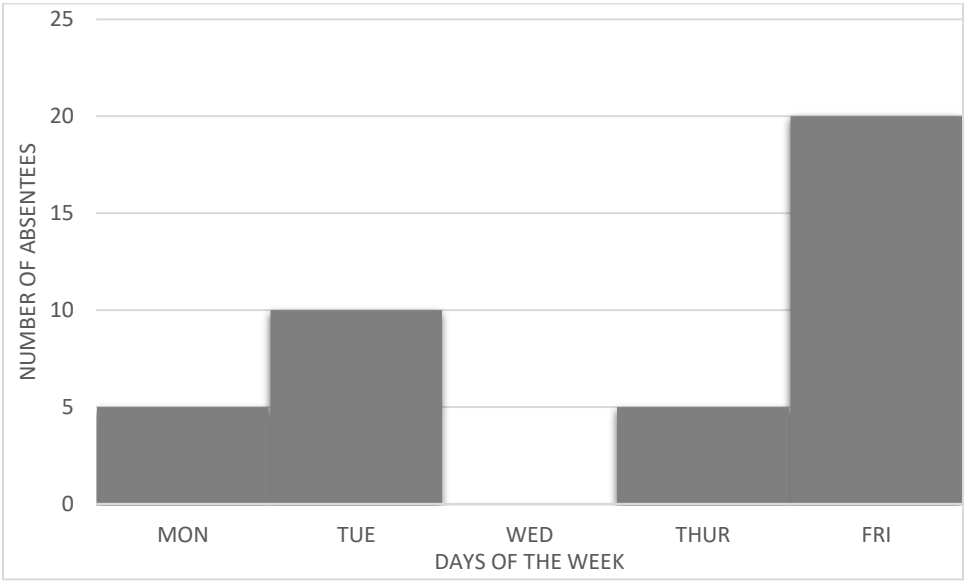
31. a) On the number line below work out $^{+}5 + ^{-}3$. (2 marks)



b) Arrange in ascending order. (2 marks)

+3, -2, -6, 0, +1

32. Study the graph below which shows a week in a class of pupils.



a) How many absentees were there on Wednesday? (1 mark)

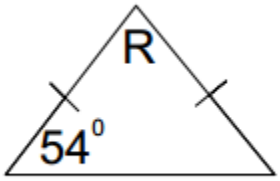
b) Find the total number of absentees that week. (2 marks)

c) How many pupils were present on Tueday? (2 marks)

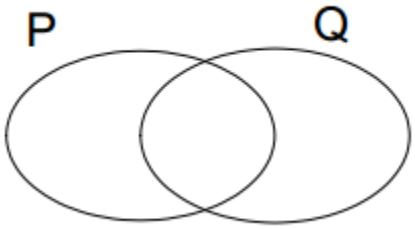
THE END.

SECTION A

1. Work out: 33 × x2
2. Solve: 3m – 5 = 7
3. Write “Forty three thousand forty” in numerals
4. Find the sum of the next two numbers in the sequence
   0, 2, 5, 10, ….. , ……
5. Simplify: -5 + - 7
6. In the bag, there are 10 blue and 5 red pens. What is the probability of picking a red pen at random?
7. Find the value of R in the diagram below

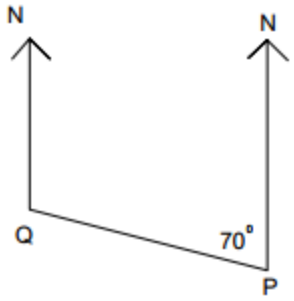


8. Shade P – Q on the venn diagram below



9. Work out: $\frac{2}{3} + \frac{1}{4}$

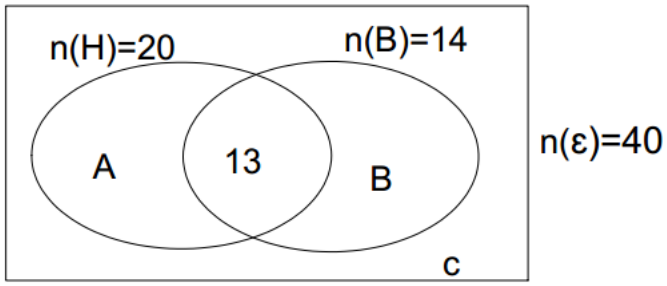
10. A basket was sold at shs. 2500 making a profit of shs. 500. Calculate the percentage profit.
11. Given that a = 5 and b = 2 . find the value of $\frac{2ba}{5}$
12. Write XLV in Hindu Arabic numerals
13. Find the bearing of P from Q in the diagram



14. Express 0.6363 as a common fraction
15. Find the value of d. $2^d \div 4 = 8$
16. The diameter of a bicycle wheel is 35cm. how many revolutions can the wheel make to cover the distance of 22 metres. (use $\pi = \frac{22}{7}$)
17. The football match between Brazil ended at 12:50am. Express this time in 24 hour clock
18. Express 36km/hr as metres per second
19. Simplify: $3^0 - 2^0$
20. Work out: $(9.6 - 6.9) \div 0.9$

SECTION B

21. The venn diagram shows 40 pupils who like maths (M) and science (S)



a) Find the value of A, B and C (I mark each)

b) How many pupils like only one type of subject? (1 mark)

c) What is the probability of picking a pupil who does not like any of the two subjects? (1 mark)

22. a) Correct 9.9987 to the nearest two decimal places (2 marks)

b) Find the unknown base $112_{three} = 22_b$ (3 marks)

23. The table below shows marks scored by pupils.

No. of Pupils	2	3	2	2	1
Marks	35	40	50	70	90

a) What was the model mark? (1 mark)

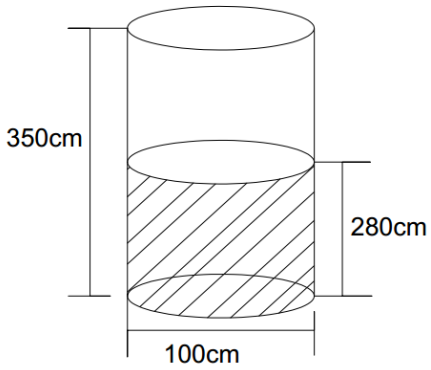
b) Find the range of the marks (1 mark)

c) Workout the mean mark (3 marks)

24. a)Solve: $\frac{2m}{3} + 3 = 5$ (3 marks)

b) Find the first 2 values of n: $4 - 3n \leq 13$ (3 marks)

25. Find the number of litres of water needed to fill the tank. (use $\pi = \frac{22}{7}$) (5 marks)



26. a) Work out: $\frac{1}{3} + \frac{2}{9} \div \frac{1}{6}$ (2 marks)

b) Simplify: $\frac{4.5 \times 0.02}{0.5 \times 0.9}$ (3 marks)

27. The sum of three consecutive numbers is 96. Find the numbers (4 marks)

28. Town P is 30km west of Town Q and Town R is 40km from Q on the bearing of 150^0.

a) Draw an accurate diagram using a scale of 1 cm to represent 10km (4 marks)

b) Find the shortest distance between towns P and R (1 mark)

29. Tree girls Agatha, Angella and Angel shared certain amount of US dollars in the ratio of 5:2:3 respectively. If Agatha got 50 dollars more than Angel,

a) Find the total number of dollars shared (3 marks)

b) How many dollars did Angella get? (2 marks)

30. A house maid went to the stationery shop and bought the following items.

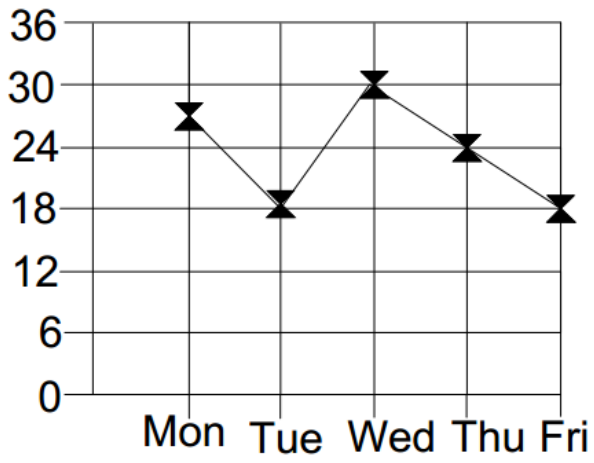
a) Complete the below below (show the working below the table) (5 marks)

Item	Quantity	Price per item	Total Cost
Books	10	Sh.600	Sh.6000
Pencils	5	Sh…….	Sh.1500
Pens	5	Sh.200	Sh……

Rulers	……..	Sh.500	Sh. 1500
		TOTAL	Sh…….

b) If the maid was given a discount of 10%. How much did she pay for all the items? (3 marks)

31. The graph below shows the temperature recorded from Monday to Friday at a landing site



a) What was the hottest day? (1 mark)

b) Find the difference between the temperature of Monday and Thursday (1 mark)

c) Workout the average temperature of that period. (2 marks)

32. The table below shows the journey by a bus from Tororo to Kampala

TOWN	DISTANCE	DEPARTURE	ARRIVAL
TORORO	0	09:00hrs	
IGANGA	60km	16:20hrs	15:45hrs
JINJA	100km	19:40hrs	19:10hrs
KAMPALA	150km		21:25hrs

a) Find the distance between Iganga and Kampala (2 marks)

b) How long did the bus rest at Jinja? (2 marks)

c) Workout the total time taken by the bus to travel from Tororo to Kampala

(2marks)

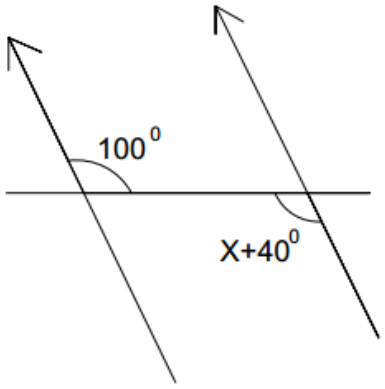
d) Find the total time taken resting (2 marks)

THE END.

SECTION A

1. Multiply: 15 x 2
2. Simplify: 4k + k – 3k
3. Find the next number in the sequences;

   1, 4, 9, 16, 25, ……
4. Find the value of x



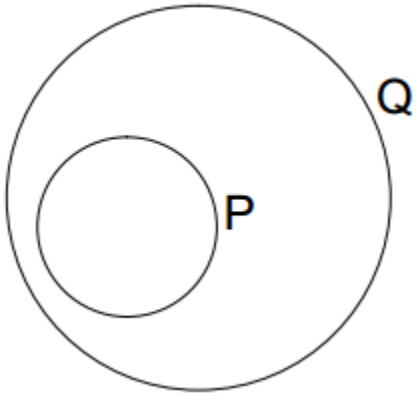
5. Find the expanded number

   $(6 \times 10^3) + (3 \times 10^1) + (8 \times 10^{-2})$
6. Arrange: 3, 0, -2, 5, -4, starting with the largest.
7. Below is a record of Ashaba's marks in home work exercises.

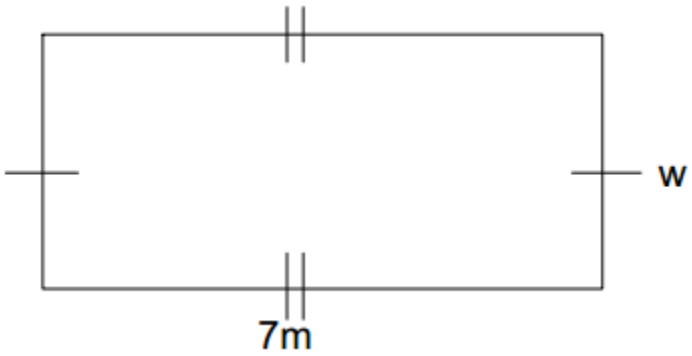
MARKS	FREQUENCY
2	2
3	1
4	1
5	2
6	1

   Find the probability that Ashaba scored 5 marks.

8. In the venn diagram below, shade PnQ

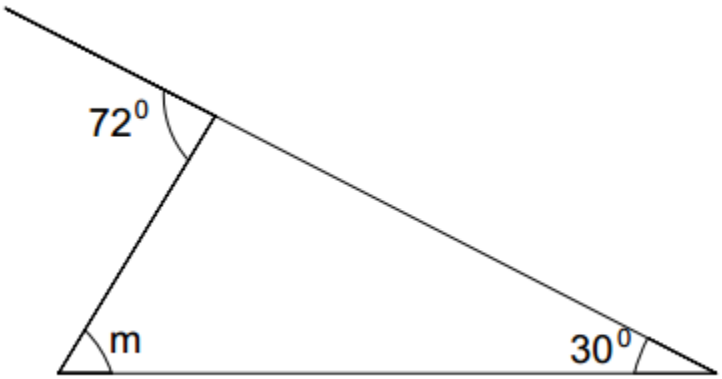


9. Calculate the area of a circle whose radius is 5cm. (use $\pi = 3.14$)
10. Work out $3^3 \div 3^1$
11. Write CXL in Hindu Arabic numerals:
12. A meeting which started at 11:50am ended at 1:00pm. How long did the meeting last?
13. Prime factorise 36 and write your answer in the product form
14. The perimeter of the rectangle below is 24m. find the value of w.



15. By selling a bicycle for shs.170,000/=, Sumaya made a profit of shs 35,000. At what price did she buy the bicycle?
16. Share 40 bananas between Alice and Brenda in the ratio of 2:3 respectively, how many bananas does each get?
17. Given that X = {0, 1, 2, 3, 4, 5, 6}, Y = {1, 3, 5, 7, 9}. Find ; n(Y – X)
18. Work out: $6 - {}^{-}3$

19. Find the value of m.



20. Solve $3y - 2 = 7$

SECTION B

21. To make 50 cahapatis for sale. Namagga has to buy the following items;

A tin of charcoal for shs. 3,000

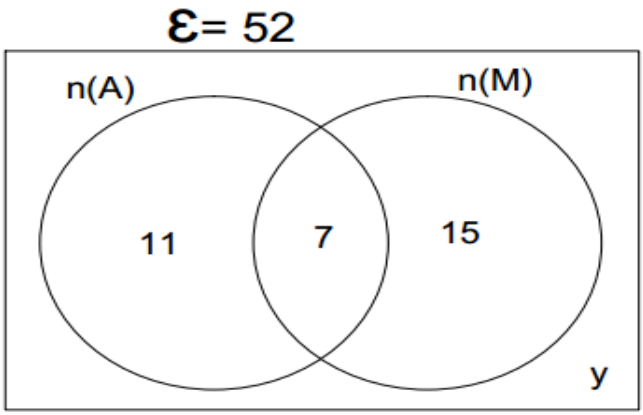
2 packets of wheat flour at shs. 5,500 each packet

$1\frac{1}{2}$ litres of cooking oil at shs. 4,000 a litre

a) Find Namagga's total expenditure (3 marks)

b) If Namagga sells each chapatti for shs. 500, calculate her percentage profit after selling all the chapatis. (3 marks)

22. The venn diagram below shows the number of women who sell mangoes (M0 and apples (A) in a market. Use it to answer the questions (a), (b) and (c)



a) How many women sell mangoes? (2 marks)

b) Find the value of y (2 marks)

c) Find the total number of women who do not sell apples. (1 mark)

23. a) Express $\frac{2}{3}$ as a decimal (2 marks)

b) Work out: $2\frac{1}{4} - 2\frac{1}{4} \times \frac{1}{3}$ (2 marks)

24. The table below shows school fees structure of P.5, P.6 and P.7 of a certain day and boarding school. Use the information to answer the questions that follow:

	SCHOOL FEES		
CLASS	BOARDERS	DAY SCHOLARS	EXAMINATION FEE
P5	Shs. 198,000	Shs. 72,000	
P6	Shs. 208,000	Shs. 85,000	
P7	Shs. 216,000	Shs. 105,000	Shs. 22,000

a) The school has 41 primary seven pupils. How much money does the school collect for examination? (2 marks)

b) Okiror has 3 children in this school. A P5 day scholar, a P6 day scholar and a P7 boarder. How much money does he pay to the school? (2 marks)

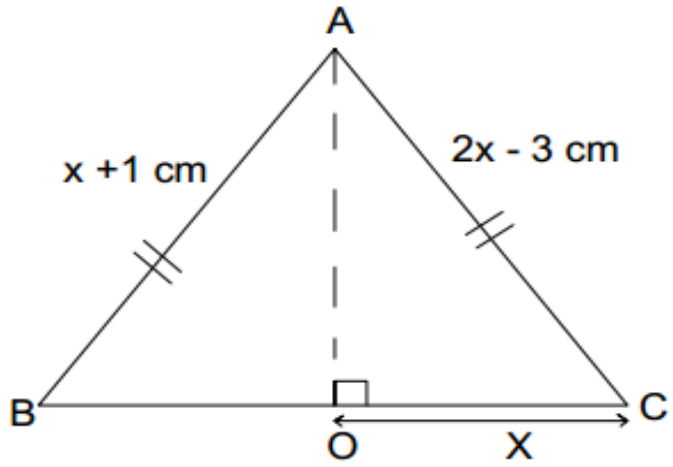
25. a) Write; 90098 in words. (1 mark)

b) What is the place value of 3 in 3,468,428? (1 mark)

c) Find the value of base n: (2 marks)

$21_n = 1001_{two}$

26. ABC below is an isosceles triangle.



a) Find the value of X (2 marks)

b) Find the length of the height AO (2 marks)

c) Calculate the area of the triangle ABC. (2 marks)

27. The following are ages of children who were immunized at a certain health centre during a certain week.

5	**6**	**7**	**5**	**6**	**8**	**6**	**8**	**10**	**8**
10	**7**	**9**	**7**	**10**	**7**	**5**	**9**	**5**	**6**
6	**5**	**6**	**6**	**7**	**6**	**9**	**6**	**9**	**7**

a) How many children were immunized during that week? (1 mark)

b) What was the modal age? (2 marks)

c) Calculate the average age of all the children aged above 7 years. (2 marks)

28. a) Solve: $3(a – 1) – 2(a -2) = 3$ (2 marks)

b) Wanyama is 3 years younger than his elder sister Nasirumbi. In 15 years time, their total age will be 49 years. How old is Wanyama? (3 marks)

29. a) With the help of a ruler, sharp pencil and a pair of compasses only, construct a triangle RST in which <RST = 45^0, <STR = 30^0 and ST = 8cm. Drop a perpendicular from R to meet ST at X. (5 marks)

    b) Measure <XRT (1 mark)

30. Mulero was driving his car at a constant speed. He had to cover a distance of 147km in $3\frac{1}{2}$ hours.

    a) Cslculate the speed at which he was driving. (2 marks)

    b) What distance was he left with after driving for 2 hours? (2 marks)

31. 2% of Kiirya's monthly salary is 10,000/=. Kiirya spends 45% of his salary on basic needs and saves the rest.

    How much money does Kiirya;

    i) send on basic needs? (3 marks)

    ii) save? (2 marks)

32. The table below shows the number of eggs collected from Naigaga's farm. (6 marks)

MON	**TUE**	**WED**	**THUR**	**FRI**
40	**25**	**30**	**20**	**15**

Using a vertical scale of 1 small square to represent 5 eggs and a horizontal scale of 1 small square to represent a day of the week, draw a bar graph to show the above information.

THE END.

SECTION A

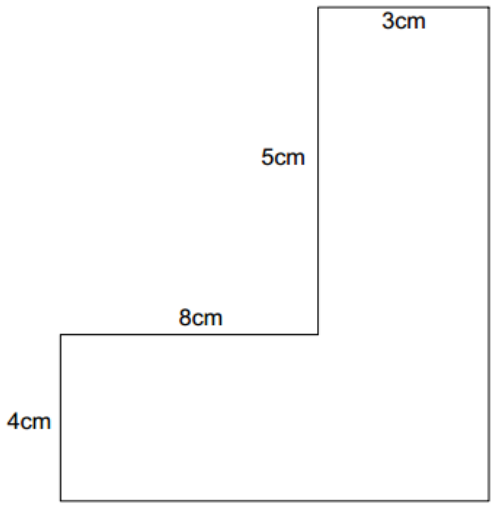
1 Multiply: 490 x 2

2 Write 64 in Roman Numerals

3 Simplify: $^{-}4 - {}^{+}7$

4 Write “eleven thousand, one hundred eleven” in figures

5 Work out the perimeter of the figure below



6 Express 0, $^{-}3$, $^{+}4$, $^{-}7$, $^{+}5$ and $^{+}7$ in ascending order

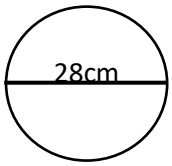
7 What is the sum of 49 and 243

8 Change 103_{five} to decimal base

9 Work out the square root of 2.56

10 If seven boys can build a house in 9 days. How long will it take 21 boys to do the same work at the same rate?

11 Work out the circumference of the circle below whose diameter is 28cm.



12 Express 1.5 km into metres

13 In a class of 40 pupils, $^{1}/_{4}$ of them are girls. How many boys are there in that class.

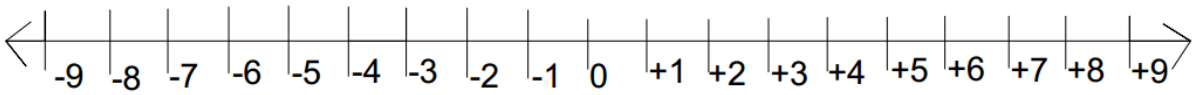
14 In the space below, draw and represent on a diagram the statement that "all girls are females"

15 Solve: $\frac{X}{6} = 2\frac{1}{2}$

16 Given that set Y = (All prime numbers less than 12). Find n(Y).

17 Express 13400 in scientific notation

18 Represent $^{-}5 - {}^{-}2$ on the number line below



19 An examination began at 7:35a.m and lasted $2\frac{1}{2}$ hours. At what time did it end?

20 Find the next number in the sequence below;

2, 4, 7, 12, 19, ——

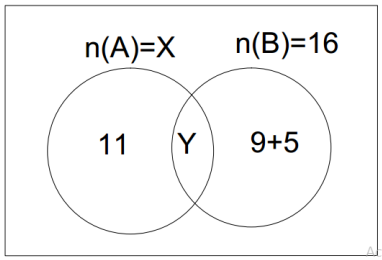
SECTION B

21 a) Simplify: $\frac{0.45 \times 0.18}{0.06 \times 1.5}$ (3marks) b) work out: $\frac{3}{4} + \frac{1}{3} \div \frac{5}{9}$ (2 marks)

22 a) If today is Tuesday, what day of the week will it be after? (2marks)

b) Work out: 3 + 1 = —— (finite 7) (3 marks)

23 Study the venn diagram below carefully and answer the questions that follow.



a) find Y (2marks)

b) Work out X (1 mark)

c) Find $n(AnB)^{l}$ (2 marks)

24 If the sum of three consecutive even numbers is 54 and the first number is y,

a) Find the value of y (3 marks)

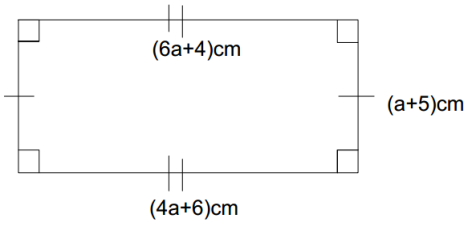
b) Work out their range (2 marks)

25 a) work out: 8+ 8 ÷ 4 (2 marks)

b) find the number expanded:

$(2\times5^{2}) + (3 \times 5^{1}) + (4 \times 5^{0})$ (3marks)

26 study the figure below carefully and answer the questions that follow



a) find the value of a (3 marks)

b) calculate the area of the figure (3marks)

27 a) Given that a = $^{-}4$ and b = $^{-}3$, work out b(a-b) (2 marks)

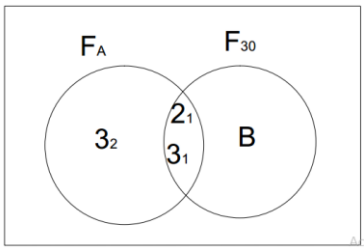
b) Solve: 3(3y – 3) – 2(2y-2) =15 (3marks)

c) use distributive property to work out: (2marks)

(489 x 13) – (489 x 3)

d) Find the sum of the prime numbers between 20 and 30 (3marks)

Study the venn diagram below carefully and answer the questions that follow



a) Find A (1 mark)

b) Find B (1 mark)

c) Find the Highest Common Factor (H.C.F) of A and 30. (2 marks)

30 a) change $\frac{3}{5}$ into a decimal fraction (2marks)

c) In a class of 93 pupils, $\frac{1}{3}$ of them are girls and the rest are boys.

i) Find the fraction of the boys (2 marks)

ii) How many more boys than girls are there in that class? (2marks)

31 a) if 6 men can dig a pit latrine in 8 days. How long will 4 men take to complete the same job working at the same rate? (3 marks)

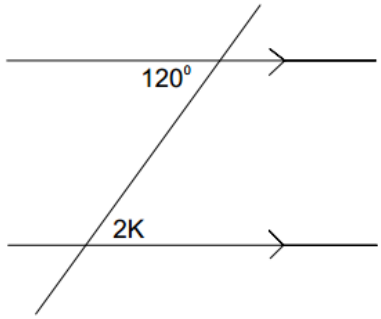
b) Amanda put 30 bottles of soda in a fridge and it took 20 minutes to cool. How long will 10 bottles take to cool if put in the same fridge at the same time. (2 marks)

32 Using a ruler, a pencil and a pair of compasses only, construct a regular equilateral triangle of side 6cm.

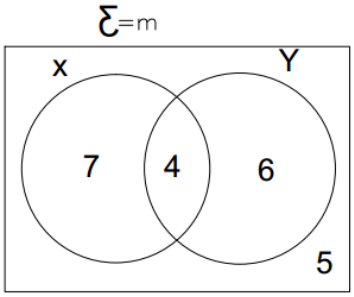
THE END.

SECTION A

1. Add 17 + 407
2. Find the LCM of 15 and 24
3. Express 0030hrs in the 12 hour clock
4. Find the size of angle marked K in the diagram below



5. Multiply: 1.03 x 6
6. Workout: 3y – 5 = 4 (finite 8)
7. Write in words: 60,019
8. Find the value of m in the venn diagram below



9. Divide $^{2}/_{3} \div {}^{1}/_{3}$
10. Fill in the missing number in the sequence

    36, 25, 16, ……. , 4, 1
11. Simplify $^{y}/_{3}$ – 2 = 5
12. Sejusa drove his car at a constant speed of 10m/s for 1 hour. How many kilometres did he cover?
13. Robinah bought a dress for sh. 10,000 and sold it to annet at sh. 14,000. What was her percentage profit?

14. Using a sharp pencil, ruler and a pair of compasses only, construct an angle of 30^0 in the space provided
15. Express 99 in roman numerals
16. Find the square root of $1\,{}^{9}/_{16}$
17. What is the value of 6 hundreds + 9 ones
18. Change 0.2727….. into a common fraction
19. The probability that Chelsea will win the match is $^{3}/_{5}$. What is the probability that Chelsea will not win the match?
20. Ketra deposited shs. 40,000 in centenary bank which offers an interest rate of 15% per year. How much did she withdraw after 9 months?

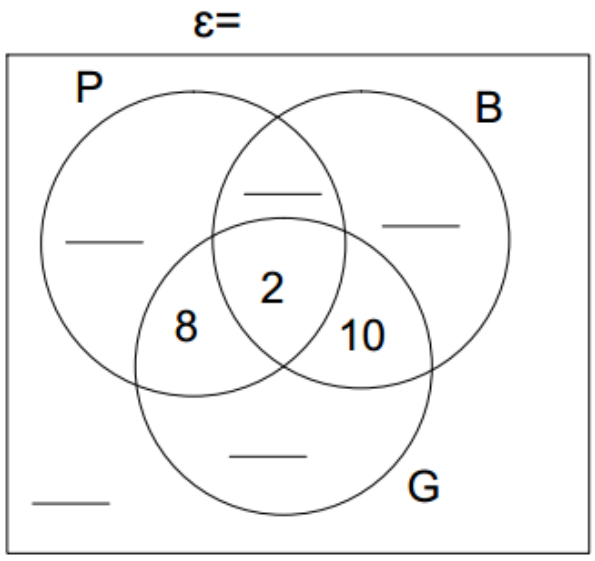
SECTION B

21. At Wasajja's wedding party, 60 special guests were invited. 22 of them dressed in purple(P), 26 dressed in black (B), and 30 dressed in green(G).

    Given that:

    - 6 guests dressed in purple and black only.
    - 10 guests dressed in black and green only
    - 8 guests dressed in purple and green only
    - 2 guests dressed in all the three colours

    a) Complete the venn diagram below (3 marks)



    b) find the number of guests who did not dress in any of the three colours (3 marks)

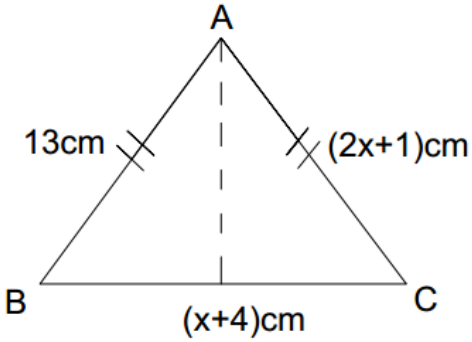
c) How many guests dressed in only one type of colour (1 mark)

22. Add: $1001_{two} + 111_{two}$ (2 marks)

b) find the base n.

$203_n = 53_{ten}$ (3 marks)

23. Study the figure below and answer the following questions



a) Find the value of x (2 marks)

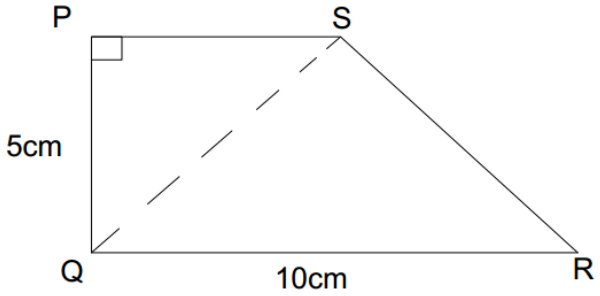
b) Calculate its area (3 marks)

24. $\frac{1}{3}$ of a wire is panted blue, $\frac{2}{5}$ of the remaining part is painted yellow and the remaining 40 metres painted red. How long is the wire? (4 marks)

25. Workout $\frac{2+10.6}{1-0.97}$ (3 marks)

b) Solve for P: 3(P +2) – (P+1) = 13 (2 marks)

26. The figure below PQRS is the a trapezium where PQ = 5cm and QR = 10cm. The area of the trapezium PQRS is $40cm^2$.



a) Find the area of the triangle QSR (2 marks)

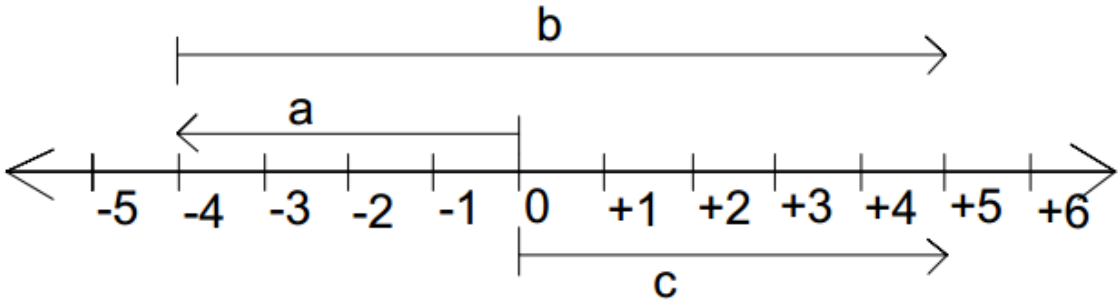
b) Find the length of side PS (3 marks)

27. Kato drove westwards from village K to village R a distance of 30km. he then drove southwards from village R to village Z a distance of 24km and then returned directly from Z to K.

a) using a scale of 1cm to represent 6km, draw an accurate diagram to show Kato's journey (4 marks)

b) Find the shortest distance from K to Z in kilometres (1 mark)

28. Use the number line below to answer the questions that follow



i) Name the integers represented by letters (3 marks)

a…….. b…… c…….

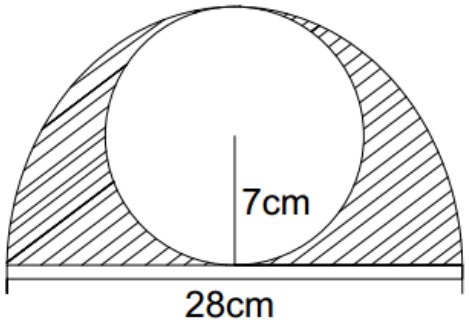
ii) Write the mathematical statement represented on the numberline above (1 mark)

29. The interior angle of a regular polygon is 108^0

i) Name the polygon (3 marks)

ii) Calculate its interior angle sum (2 marks)

30. Study the figure below and answer the questions about it



a) Workout the area of the the shaded part ($\pi = \frac{22}{7}$) (5 marks)

31. The table below shows how schools scored in the Copa Coca cola Championship football competitions

Goals scored	70	60	50	40	80
Number of teams					

a) How many teams participated in the tournament? (1 mark)

b) What was the modal score? (1 mark)

c) what was the goal average score? (2 marks)

d) How many teams scored above the average? (1 mark)

32. Below is a bus time table. Study it and answer the questions that follow.

Station	Tororo	Iganga	Jinja	Kampala
Arrival time		9:10am	10:25am	12:00 noon
Departure time	8:00 am	9:40am	10:30am	

a) At what time does the bus leave iganga for Jinja? (1 mark)

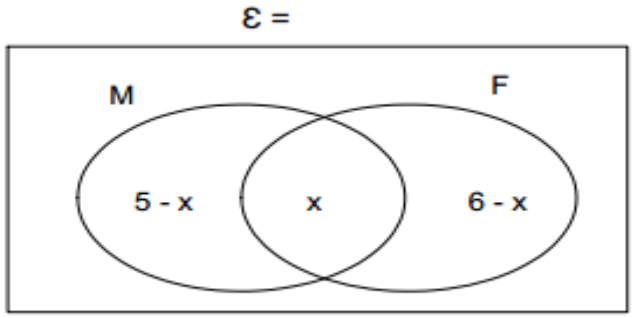
b) Musoga boarded the bus from Tororo to kampala. For how long was he in the bus? (2 marks)

c) If the distance between Tororo and Kampala is 320km, find the speed of the bus . (2 marks)

THE END.

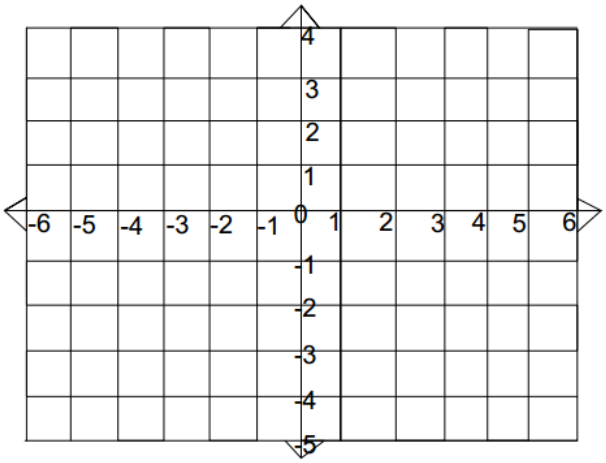
SECTION A

1. Add 2812 + 188
2. Simplify $\frac{2}{3}$ of $\frac{3}{4} - \frac{1}{8}$
3. Solve 8 – 2X = 4
4. Simplify 3(y – 4) – 2(y – 3)
5. In a home of 8 people, 5 like eating meat (M) and 6 like eating fish (F) as shown in the venn diagram.



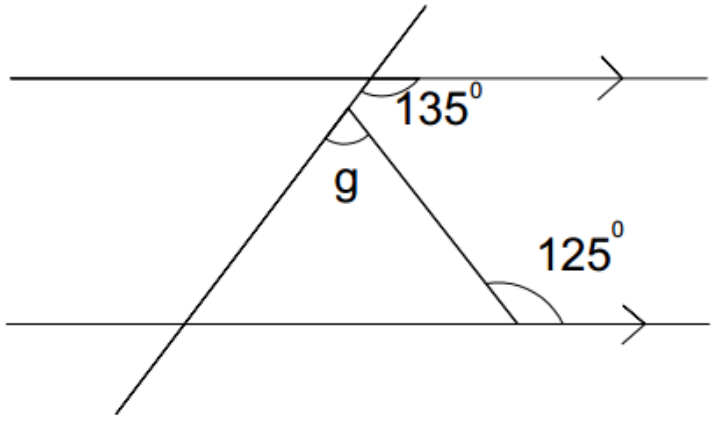
If those who eat only one dish are given three eggs each, how many eggs are served in every meal?

6. On the graph below mark point A (-1,4)

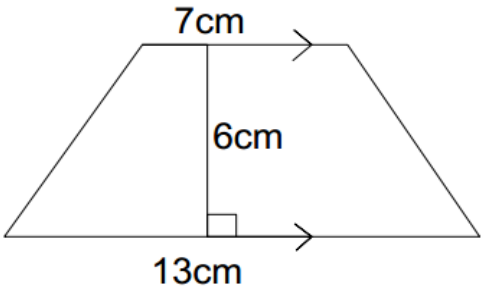


7. The mean of (x + 9), (x + 4) and (x – 3) is 22. Find x

8. Study the figure below and find the value of angle g in degrees



9. A baby started sleeping at 9:10 am. And woke up at 1:40pm . for how many hours did he sleep?
10. The figure is a trapezium. Find its area

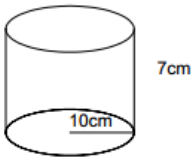


11. Express MCDXC in Hindu Arabic
12. After a 10% increase, akello's salary is now 10450. Calculate his original salary.
13. Evaluate 2(a-b) if a = -3, b = 2
14. Kamatu bought 700gm of salt at 500/= a kilogram. How much did he actually pay?
15. Kasiri is now 3 years old. His mother is 25 years old. How old will the mother be when kasiri is 25 years.
16. The cost of one jean trousers is shs. 9000/- and the cost of one Busuuti is shs. 35,000/-. Find the cost of 2 jean trousers and 3 busuuti
17. Determine the next number in the sequence

    0, 2, 5, 10, 17, 28, ——

18. If y + 2 = 1 (finite 3) , find y

19. The cylindrical tank below has a base area of 314 cm^2. Calculate its volume.

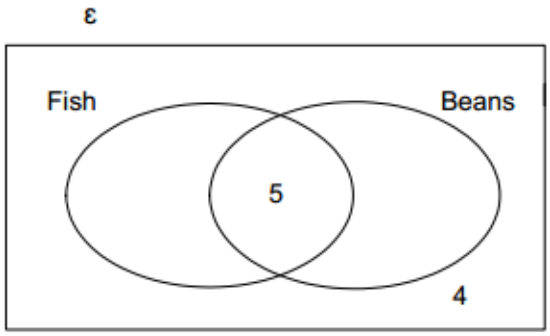


20. Divide 10881 by 9

SECTION B

21. At a holiday attended by 40 guests, some guesr ate fish and beans. If 18 guests ate beans and 4 did not eat any of the dishes.

    a) use the information given to complete the venn diagram.



    b) How many guests ate fish only?

    c) if each plate of fish only costs 2000/-, that of beans only costs 1000/- and that of both fish and beans costs 3000/-. Calculate the total amount of money spent on buying the food for the guests.

22. Two motorists kato and Wasswa left kampala for masaka from the same place at the same time. Kato travelled at an average speed of 80km/hr while Wasswa travelled at an average speed of 60km/hr

    a) How far apart were the two after the first 30 minutes of travelling?

    b) If both motorists left kampala at 9:00am at what time did kato arrive at Masaka which is 120km from Kampala?

    c) For how long did the first motorist wait at Masaka before the second motorist arrived?

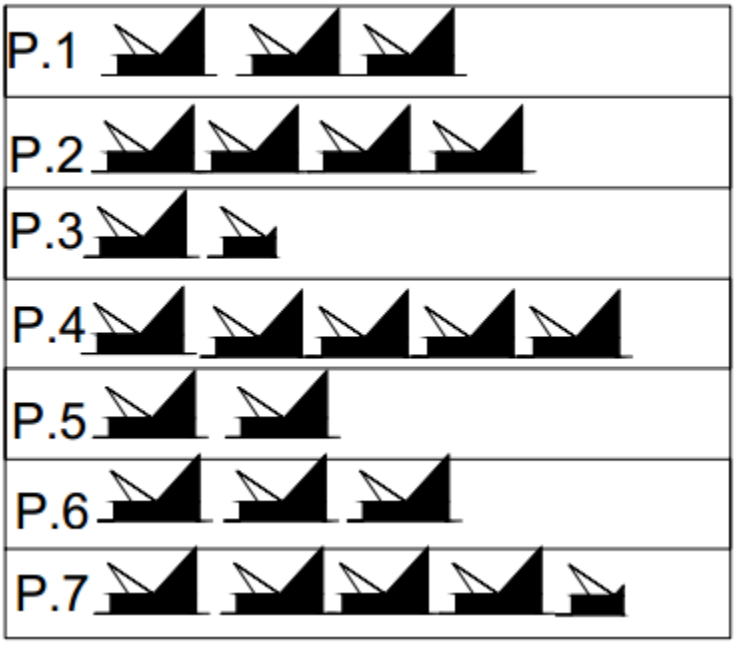
23. a) Express $\frac{P}{3} + \frac{(P+1)}{5}$ as a simple fraction

b) Simplify $2\frac{1}{2} - \frac{1}{6} \div \frac{1}{3}$

24. a) Solve 3 – (p – 1) = 2(p +5)

b) Three children aged (x + 3), (3x – 10) and (2x +5) have a total age of 34 year. How old is each child?

25. Below is a pictograph showing books given to pupils in Ndere P. School. Study it and answer the questions.



If  = 50 books

a) How many books were given to Ndere Primary School?

b) If each pupil received one book, how many pupils are P.7?

c) If each book for P.4 cost shs.1500, how much money was used to buy all the books for P.4? (write your answer in words)

26. a) Find the sum of all prime numbers between 50 and 60

    b) By forming an equation, find 3 consecutive odd numbers whose sum is 57

27. Given that $x = 2y + 1$, complete the table below

X	$^{-}9$			3	11
Y		$^{-}3$	0		

28. Three people Annet, Babra and Christine imported cars in the ratio 3:2:1 respectively. If Annet imported 48 cars, what is the total number of cars imported by the 3 people?

29. a) Solve the inequality; $3(x+4) < 5x - 2$

    b) If twice the number is 16, what is half the number?

30. A rhombus has its diagonals 10cm and 24 cm.

    a) calculate one side

    b) Determine the perimeter of the rhombus

31. Construct a triangle ABC in which AB = 8cm, BC = 6cm, angle ABC = 120^0.

    a) Measure the length AC

    b) Measure angle ACB

32. Musa has 150 mangoes to sell. He puts them in heaps of 5 for 800/-, or heaps of 3 for 500/-

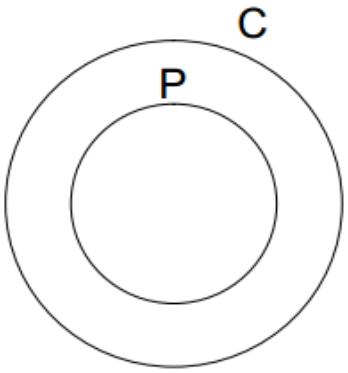
    a) Which option do you think will fetch him more money?

    b) How much more will he get when he uses that option?

THE END.

SECTION A

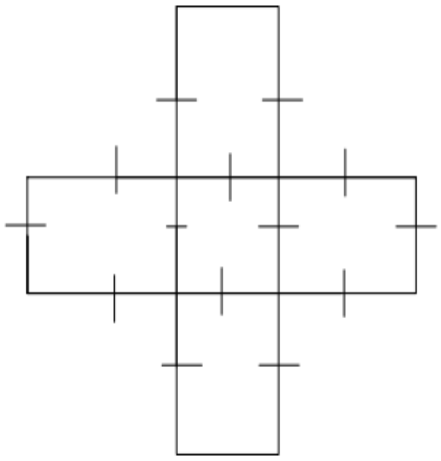
1. Divide $24 \div 3$
2. Express XXIX in Hindu Arabic numerals
3. Given that set P = {2, 3, 5} and set C = {1, 2, 3, 4, 5}. Represent the two sets above in the diagram below.



4. The median of 5 (five) integers is -1. Find their range
5. If X = -2, calculate the value of x:

$$\frac{X^3}{X^2}$$

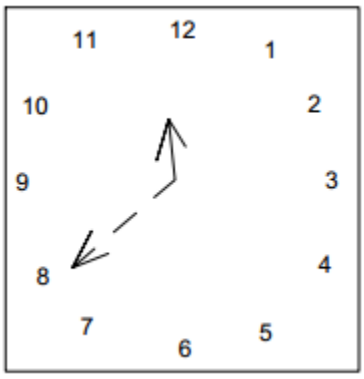
6. Simplify $\frac{3}{4} + \frac{1}{3}$
7. Draw the solid figure formed when the net below is folded



8. Work out

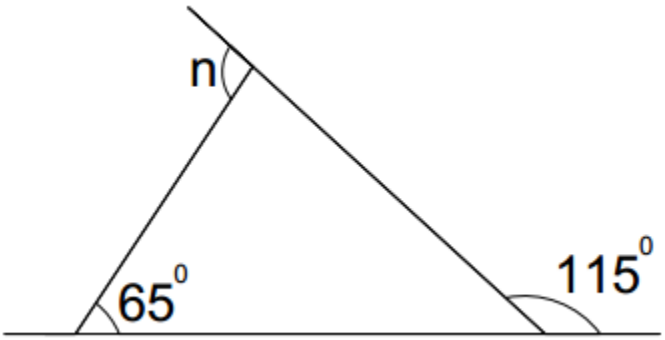
$$\frac{5 + 3^2 + 2^2}{3^0 + 2^3}$$

9. Find the lowest common multiple LCM of 6 and 9
10. By the time the enumerator reached home from work, her clock face was reading as shown below



At what time did she reach home on the 24 hour clock

11. The average mass of three pupils is 35kg. when the fourth pupil joins the group, the average mass becomes 40 kg. find the mass of the fourth pupil
12. Okello sold a turkey for shs 55,000 making a profit of shs 9,500. How much did he buy the turkey?
13. In the figure below, calculate the value of n



14. Change 120_{three} to base five

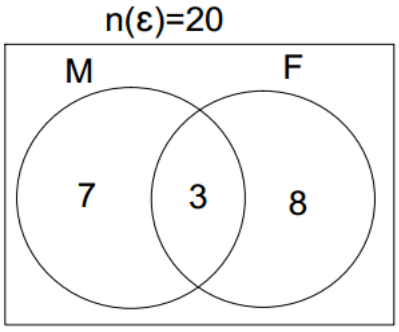
15. Ann scored the following marks in the series of test as shown below

MARKS	FREQUENCY
4	2
7	1
6	4
7	1
8	2

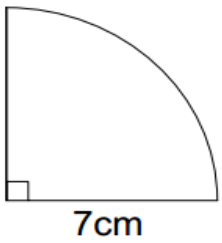
Find the probability that Ann scored a 6

16. Calculate the volume of a cube whose width is 12cm
17. Moses and Janet got (3y – 8) apples altogether. If Janet got y apples and Moses got (y –2) apples, what is the value y?

18. The venn diagram below shows members who eat meat (M), and fish (F). how many members do not eat any of the two sauces?



19. The interest on sh. 20,000 for 2 years is shs 1200. Find the simple interest rate per annum
20. Workout the distance round the shape below, ($\pi = \frac{22}{7}$)



SECTION B

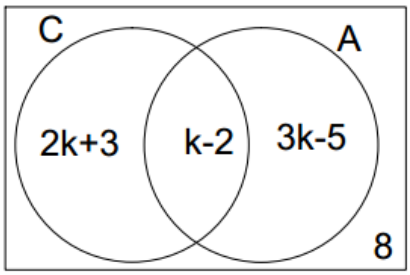
21. Below is the price list in the school canteen.

Item	**Price**
Foot ruler	Sh. 1,000
Geometry set	Sh. 2,500
A dozen of pencils	Sh. 1,800
Bic pen	Sh. 500

a) Atim bought 4 pens, a geometry set and 2 foot rulers. How much did she pay altogether? (2 marks)

b) Walter bought 2 geometry sets, 6 foot rulers and 10 pencils and he was given a discount of 20%. Find his actual payment. (3 marks)

22. The venn diagram below, shows the number of pupils who support Arsenal (A) and cranes (C).



a) Find the value of k if 30 pupils do not support Cranes. (2 marks)

b) If a pupil is chosen at a random to clean the chalkboard, what is the probability of choosing one who supports Arsenal only? (4 marks)

23. a) The ratio of men to women in the village is 5:7 respectively. If there are 63 women in the village,

i) Find the total number of adults in the village (2 marks)

ii) How many men should be needed in order to make the ratio of men to women 1:1? (1 mark)

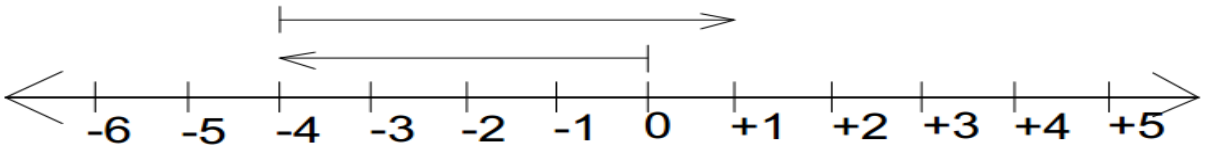
b) Simplify; $\frac{5.4\ (11+9)}{1.2}$ (2 marks)

24. a) Using a ruler, a pencil and pair of compasses only, construct a triangle MNP, such that MN = 7cm, angle MNP = 60^0 , angle PMN = 75^0; in the space provided below. (4 marks)

b) Measure the length

i) NP = ii) MP = (1mark each)

25. study the movements made as shown on the number line and answer the questions



a) On the number line above, write the value on each arrow indicating the movement

i) ii) (2 marks)

b) Write down the two numerical operations which result on the number line above (2 marks)

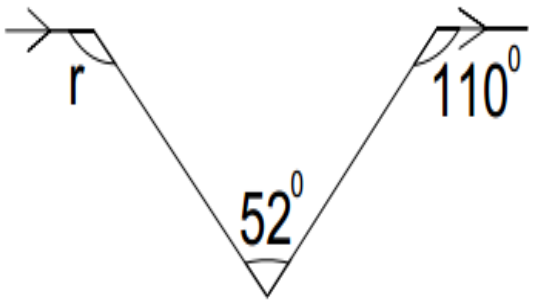
c) Solve one of the operations above (1mark)

26. Ham is 4 years younger than Tom and Sam is 4 years older than Tom in 10 years time, the sum of their ages will be 63 years.

a) How old is Tom now? (3 marks)

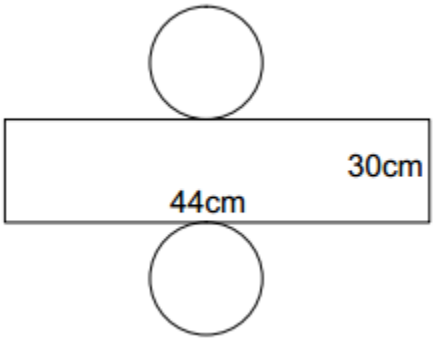
b) Find the difference of sam's age and Ham's age after ten years. (3 marks)

27. In the figure below, calculate the value of r in degrees. (2 marks)



b) Find the number of right angles of a regular hexagon (2 marks)

28. The piece of a metallic sheet below measures 44 cm long and 30cm wide with circular surfaces as shown.



Calculate the total surface area when the metallic sheet is turned into a closed cylinder ($\pi = 3.14$) (5 marks)

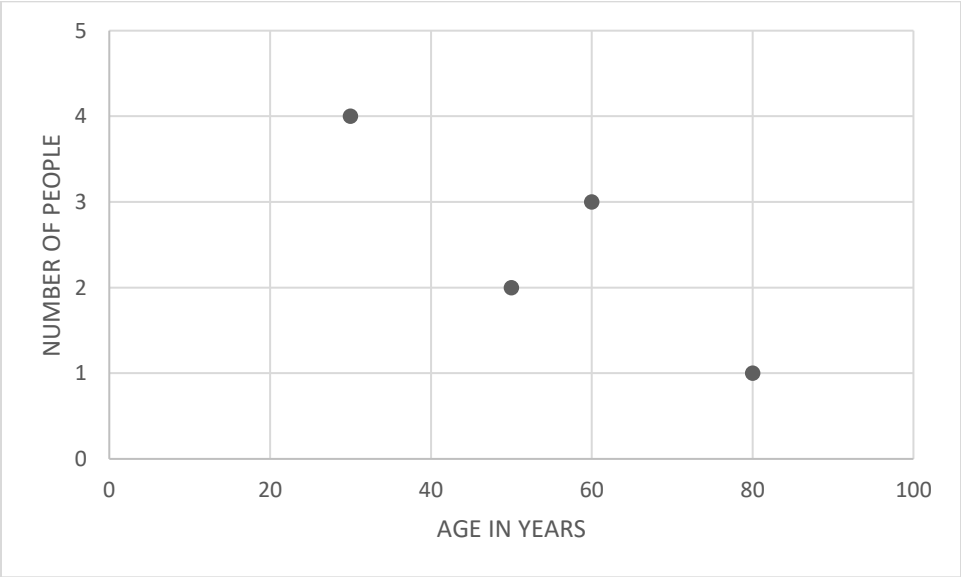
29. a) Write 10794 in words (1 mark)

b) Correct 99.998 to 2 decimal places. (1 mark)

c) Find the number which has been expanded below (2 marks)

$(2 \text{ X } 10^3) + (6 \text{ X } 10^2) + (3 \text{ X } 10^0) + (8 \text{ X } 10^{-1})$

30. The line graph below shows the number of some of the people counted during the census in a certain area.



a) How many people were aged above 40 years? (1 mark)

b) What was the modal age? (1 mark)

c) Work out the mean age. (2 marks)

31. A school van was driven at a steady speed of 80km/hr from 8:30am to 11:30am

a) Find the distance it covered. (3 marks)

b) If on the return journey it was driven at a steady speed of 96km/hr, how long did it take to travel back? (2 marks)

32. St. Jude Primary School performed as follows in mock examination 2014

20 candidates were in division 1

40 candidates were in division 2

30 candidates were in division 3

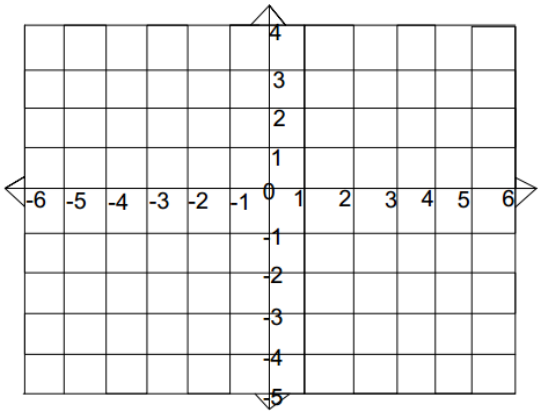
10 candidates were in division 4

Represent the above information on the circle graph of radius 3.5cm. (5 marks)

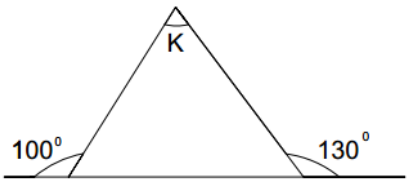
THE END.

SECTION A

1. Divide: 0.096 by 12
2. Using the grid provided below, plot A (-3, 4)

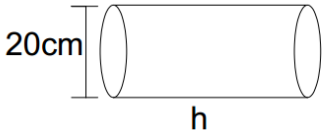


3. Kiwanuka divide his 360 hectare farm land into plots each of area $40m^2$. How many plots did he make?
4. Given that Set B = (b,c,d). list down all the possible subsets of set B
5. Work out: $1\,{}^{2}/_{3} - ({}^{1}/_{2} \div {}^{1}/_{4})$
6. Given that a = b = -3, c = -2 and d =4. Find that value of : $\frac{ad + abc}{bc}$
7. Mangusho owns two different clocks. One clock gives an alarm after every 20 minutes and another clock gives an alarm after every 24 minutes. If they make an alarm together at 8:45pm. At what time will they give an alarm together again?
8. Twenty years ago, mbogo was seven years old. How old will he be in fifteen years time from now?
9. Find the value of angle marked K in the figure below

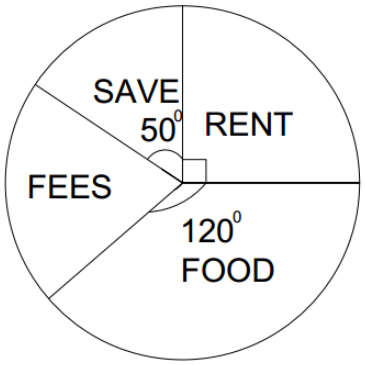


10. Zalwango saves 24% of her weekly income which amounts to shs. 36,000/=. What is her weekly income?
11. Sendi's cassava shamba has an area of $69\,{}^{4}/_{9}$ m^2 . how long is one side of the shamba?
12. The cross section area of the given given below is $154cm^2$ and its volume is $1848cm^3$

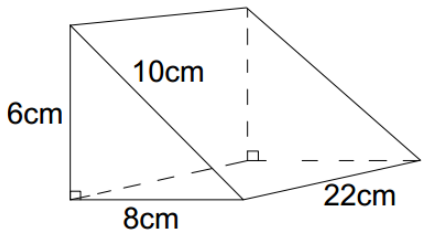
Find the value of h



13. Nsimbi ate0.56 of a sugar cane and Waliyo ate the rest. Find the ratio of Waliyo's piece to that of Nsimbi's.
14. The weight of 9 cartons of salt is 405kg. what is the weight of 21 such cartons?
15. A car moves at a speed of 400 metres per minute. How long will it take to cover a distance of 900 metres?
16. The pie chat below shows how Mukopo spends his monthly income. If mukopo saves Shs.100,000/= every month, calculate his salary.



17. 4 men paint a house in 8 days. How many more men are needed to paint the same house in 2 days?
18. At one time in a drama show, there were two hundred eighty three men and three hundred sixty eight women. Of these, there were one hundred thirty six married couples while the rest were single people. How many single people were there?
19. Kidayo bought his rectangular land measuring 50 metres by 45 metres. He wants to fence its posts using posts which are placed 5 metres apart. How many posts does he need?
20. The diagram below represents a prism. Find the total surface area of the prism.



SECTION B

21. In a club of 360 people, $^{3}/_{4}$ play volleyball, $^{2}/_{3}$ of the remainder play football and the rest play lawn Tennis.

    a) how many people play lawn tennis?

    b) how many more people play volleyball than football? (2 marks)

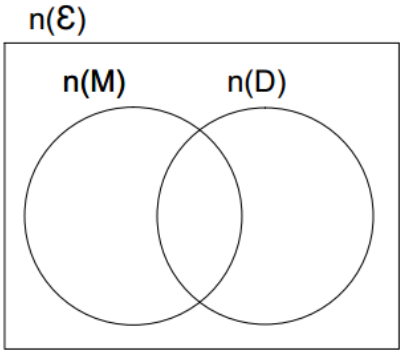
    c) if the club is looking for the chairperson. What is the probability of choosing a footballer? (2 marks)

22. The cost of painting the 4 walls and the ceiling of a room which is 4m by 6m by 5m is shs.744,000/=. Calculate the cost of painting each square metre of the room. (3marks)

23. DHFO Club is composed of people who like Drama n(D) and Music n(M).

    37 people participate in Drama. 2X in Music only. 5 people participate in neither of the two activities. 21 participate in only Drama and X people participate in both activities.

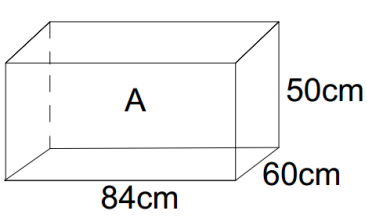
    a)Represent the above information on the venn diagram below. (3 marks)

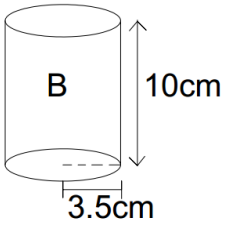


    b) find the number of those people who like the two activities (2 marks)

    c) how many people do not participate in Drama? (2 marks)

24. The figures below represent a metallic container A and a cylindrical container B. study them carefully : containers B are to be packed in the metallic container A



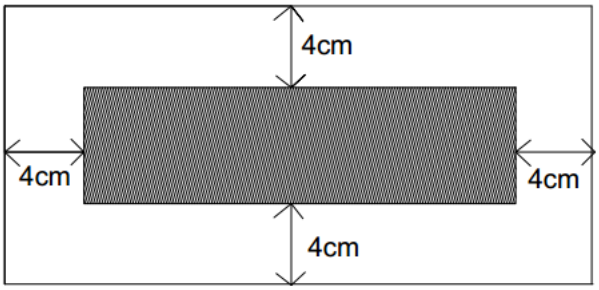


a) How many cylindrical containers (B) can be packed in the metallic container (A)? (2 marks)

b) If the metallic container A is turned into a tank full of water and that water is to be drawn out of it using container B. how many full containers B can be obtained from A? (3 marks)

25. A wheel of a bicycle has a diameter of 0.77 metres. If it makes 100 revolutions , what distance does it cover in metres? (4 marks)

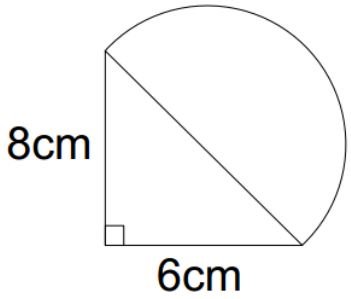
26. The diagram below represents a photograph 24cm by 16cm mounted on a frame leaving a margin of 4cm wide on all sides. Calculate the area of the margin. (4 marks)



27. a) Mother is six times as old as her daughter Chandiru. In 10 years time, the difference in their ages will be 50 years. How old will each of them be in 10 years time? (3 marks)

b) Solve for K: $\frac{2K+2}{3} = \frac{K+4}{2}$ (3 marks)

28. a) The figure below represents a plot of land owned by Mr. Lumbuye. Calculate the area of the plot of land. (3 marks)



b) What is the distance around his plot of land? (3 marks)

29. a) $12\frac{1}{2}$% discount on an article amounts to shs.1,600/=. Calculate the marked price of the article. (3 marks)

b) On a farm, there are 30% more goats than sheep. If there are 130 goats, how many animals are on the farm? (3 marks)

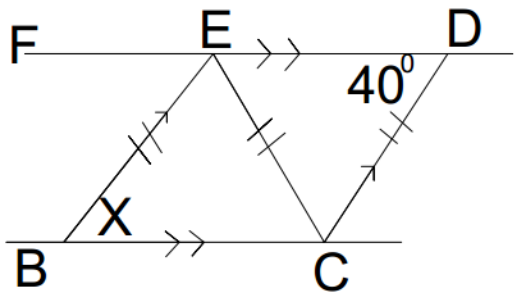
30. The table below shows how pupils performed in a mathematics examination. Use it to answer the questions that follow:

Frequency	1	1	2	1	1
Scores	80	75	90	60	85

a) What is the modal score? (1 mark)

b) Find the mean of the scores (3 marks)

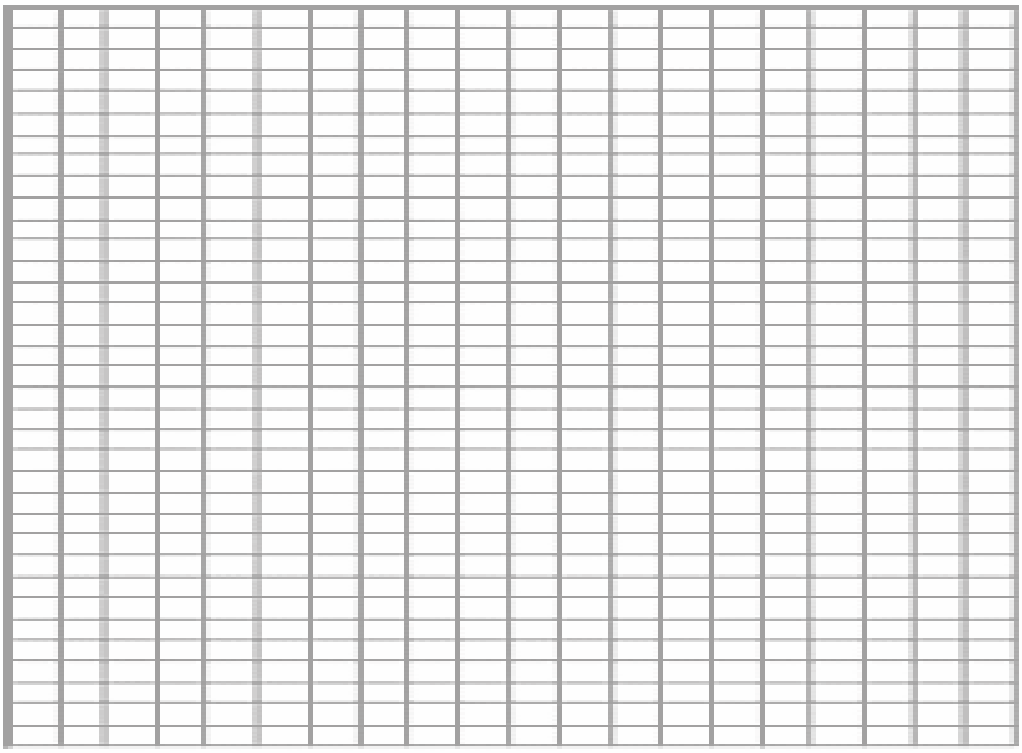
31. a) in the figure below, FED is a straight line, FD is parallel to BC and BE is parallel to CD. Angle EDC = 40^0. Find the size of angle BED (2 marks)



b) What is the size of angle X?

32. Musiitwa left Ndede at 6:00am driving to Mutoni. He moved at a steady speed of 40km/hr for $1\frac{1}{2}$ hours from Ndede to Mvaro. He rested for 30 minutes at Mvaro and then drove to Mutoni at a steady speed of 20km/hr for 2 hours.

a) Draw a travel graph to show Musiitwa's journey (3 marks)

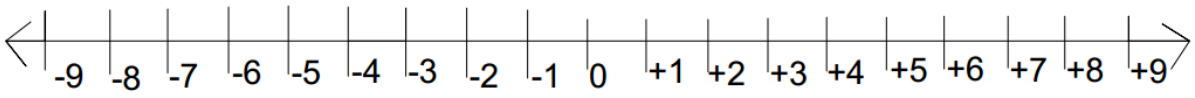


b) From your graph, determine the distance from Ndede to Mutoni

THE END

SECTION A

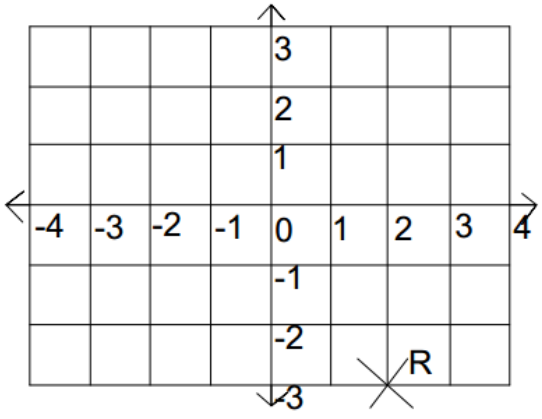
1. Divide 204 ÷ 4
2. Expand the number 2138 using values
3. Work out +7 - +2 using the number line below



4. Doctor Kuwala had 35 notes of money numbered consecutively from AK004624 to the last note. Find the number written on the last note
5. Find the interior angle sum of a polygon with 7 sides
6. The base area of a cube is 49cm^2. Calculate the volume of the cube
7. Simplify 0.19 – 0.09 + 0.26
8. Two supplementary angles are in the ratio 5:4 . find the size of the larger angle
9. Multiply:

Hrs	Min
3	40
x	6

10. Study the graph below and state the coordinates of point R



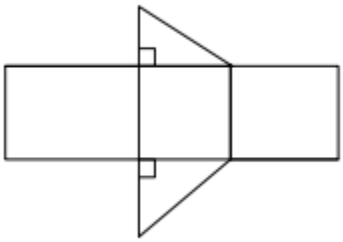
11. Solve for M in the equation: $\frac{6M}{4} - 10 = 14$
12. A land dealer bought 4 hectares of land at shs. 2,400, 000/= and later sold it at shs 3,200,000/=. Find the profit made on each quarter of a hectare

13. Find the next two numbers in the sequence:

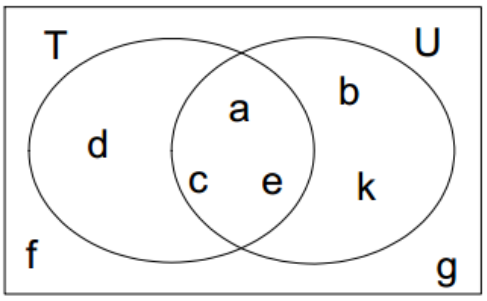
    1, 3 ,6,10, 15, 21, …… , …….

14. The Great Ten Friend's family meeting ended at 12:25p.m. find the time the meeting started if took 2 hours 35 minutes

15. Name the solid which has the net shown below



16. Express 0.1414…. as a common fraction
17. Increase 240 children by 45%
18. The bearing of Mugunjju's garden from Gode's mango tree is 247^0 . what is the bearing of Gode's mango tree from Mugunjju's garden?
19. Study the venn diagram below and write the elements of $(TnU)^l$



20. Given that r = t, m = 3 and t = 4, evaluate (3r + m)

SECTION B

21. a) Express 307m to kilometres (2 marks)

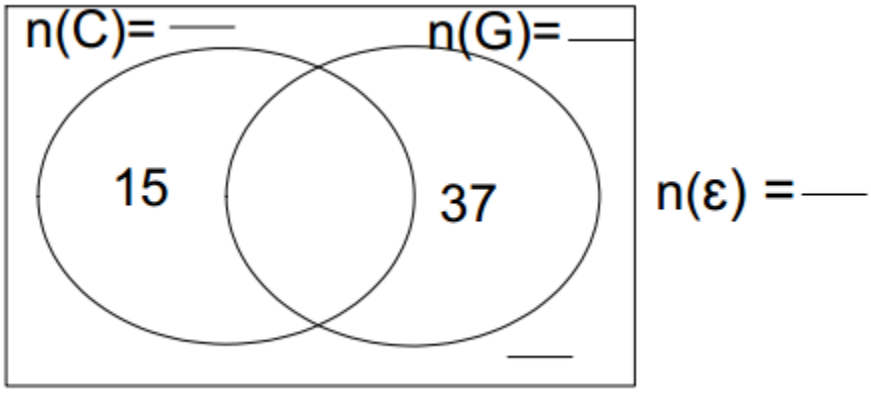
    b) Find the length of a rectangle whose perimeter is 40cm and width 8cm (2 marks)

22. Solve for Q: 3Q – 4 = Q + 9 (3 marks)

b) Mrs Bangi has 2n + 6 hens. Mugisha has 20 more hens than Mrs Bangi. If they have 64 hens altogether. Find the number of hens each one has (2 marks)

23. In a village of 89 members, 15 grow carrots only, 37 grow groundnuts only, 16 grow both carrots and groundnuts while (x – 2) grow other other crops.

a) Represent the above information on the venn diagram (2 marks = half mark each)



b) How many farmers grow other crops? (2 marks)

c) How many farmers don't grow carrots? (2 marks)

24. The ratio of sugar to maize flour to water in a porridge mixture was 2:7:21 respectively.

a) if the cook needed 105 litres of water to water to prepare porridge. Workout the weight of sugar in kilograms that will be needed. (3 marks)

b) Work out the total cost of maize flour needed given that 1 kg costs shs. 1,800/= (2 marks)

25. The table below shows the rates of sending a message in Uganda using different networks

NETWORK	RATE PER MESSAGE
MYN to MTN	Shs. 110
MTN to Other Networks	Shs. 130
AIRTEL to AIRTEL	Shs. 40
AIRTEL to Other Networks	Shs. 100
K2 to K2	Shs. 80
K2 to Other Networks	Shs.100

a) Sandra sent 4 messages using MTN to K2 and 5 messages using AIRTEL to MTN.

how much was she charged altogether? (3 marks)

b) How much would Peter save if he sent 15 messages using K2 to other networks than using MTN to other networks? (2 marks)

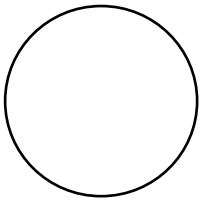
26. A cargo plane left Entebbe at 8:00am travelling at speed of 300km/hr for $2\frac{1}{2}$ hours to ciaro. Due to bad weather it changed its speed to 240km/hr for 45 minutes to reach Lagos. it was offloaded for $1\frac{1}{4}$ hours at Lagos.

a) Workout the distance between Entebbe and Lagos (3 marks)

b) At what time did offloading end? (2 marks)

27. a) If today is Wednesday. What day of the week was it 42 days ago? (2 marks)

b) Add: 3 + 4 = ……. (finite 5) (2 marks)



28. A man dug a pit latrine of 48ft within 4 days. The first two days, he dug 21ft. on the third day, he dug $\frac{1}{3}$ of what was left. The rest of the work was completed on the fourth day.

a) What fraction of the latrine was dug on the fourth day? (2 marks)

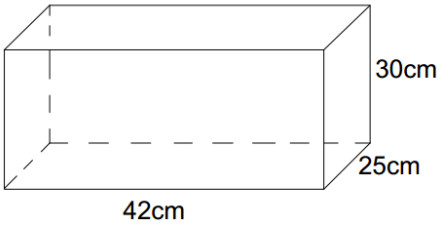
b) How nany feet were dug on the last 2days? (2 marks)

c) If each foot was paid shs.700/=, how much did the man earn on the last day? (2 marks)

29. Using a ruler, a pencil and a pair of compasses only, construct a kite CDEF in which diagonal CE = 10cm, diagonal DF = 6 cm and diagonal CE meets diagonals DF at N, 3cm from C. (4 marks)

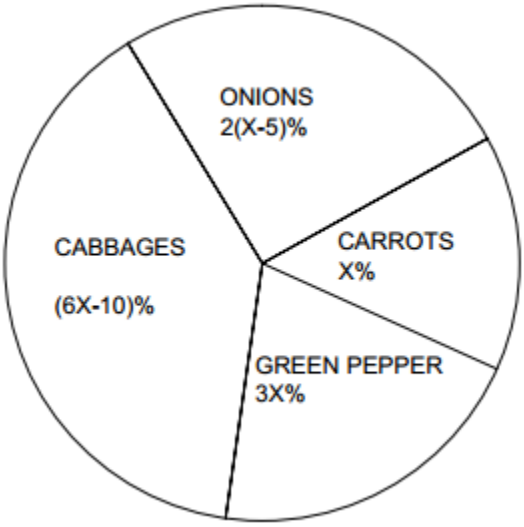
30. Below is a rectangular tank of water

a) What is the volume of the tank (2 marks)



b) Find the capacity of the tank in litres. (2 marks)

31. The circle graph below shows how Joyce uses her plot of land. If every 1% earns her shs. 2,500/= in a year.

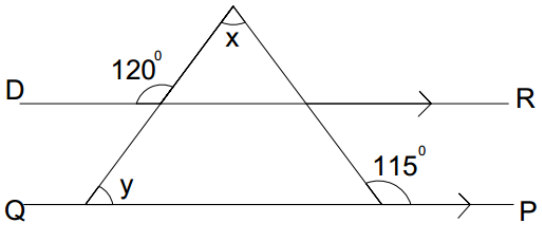


a) What percentage of land does she use for onions? (2 marks)

b) How much does she earn from carrots and cabbages? (2 marks)

c) If she pays 15% tax every year, how much is she taxed? (2 marks)

32. In the diagram below, line DR is parallel to line QP. Study it carefully and answer.



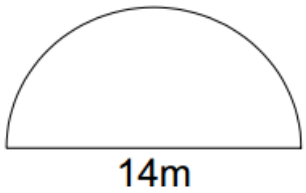
a) Calculate the size of each angle marked:

i) y ii) x (2 marks each)

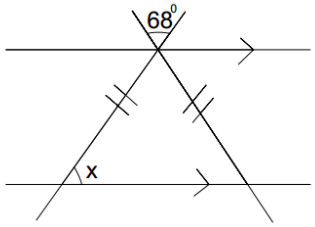
THE END.

SECTION A

1. Workout: 12 ÷ 4
2. Simplify: 7p + p + 2p
3. Given that set X = {p, q, r, s, t}, set Y = {o, p, a, q, u, e}. find n(X-Y)
4. Simplify: -3 - $^{+}$4
5. Write CXLV in Hindu arabic numerals
6. Write in figures: " Thirty four thousand, two hundred two"
7. Find the next number in the sequence,
   37, 26, 17, 10, ……. , ……..
8. Given that r = -6 and t = 4, find the value of $t^2 + r^2$
9. Calculate the area of the figure below. ($\pi = \frac{22}{7}$)

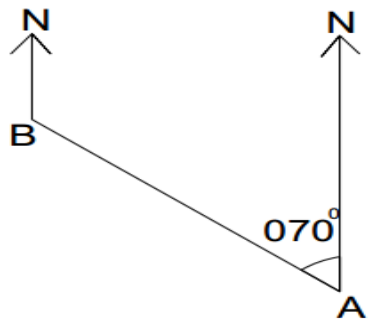


10. Seven cups cost shs. 3,500. What is the cost of three similar cups?
11. A milk man had 8 litres of milk. He sold it using a 500ml cup. How many cups did he get from all the milk?
12. Study the figure below and the question. Find the value of x.



13. What is the value of 3 in the figure 650.73
14. How many sides has a polygon whose exterior angle is 45^0?
15. Six people can do a piece of work in 12 days. How many people are needed to do the same work in 9 days?
16. Using a ruler and a pair of compass only, construct an angle of 75^0
17. Find the square root of $\frac{81}{64}$
18. A car covered 180km in 2 hours 15 minutes. Calculate the car's average speed

19. Find the bearing of A from B in the diagram



20. Calculate the simple interest on shs 200,000 at a rate of $3\frac{1}{2}$ % per annum banked for 2 years.

SECTION B

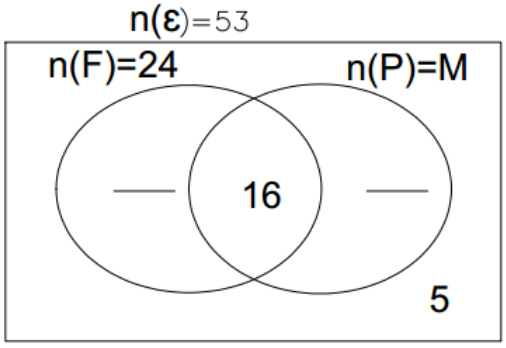
21. Chan bought the following items from the shop.
    - $1\frac{1}{2}$ kg of sugar at 2,600/= per kg.
    - 1500gm of rice at 3,000 each kg
    - $\frac{1}{4}$ dozen of books at 600/= a book
    - 3 kg of beans at 7800/=

    a) calculate Chan's total expenditure (4 marks)

    b) If Chan paid shs 20,000, what change did he get back? (1 mark)

22. At a party attended by 53 guests, 24 guests took Fanta(F), m guests took Pepsi (P), 16 guests took both Fanta and Pepsi and 5 guests took neither of the two.

    a) Complete the venn diagram (2 marks)



b) Find the number of guests who took Pepsi only (3 marks)

23. a) Change 201_{five} to binary system (2 marks)

b) Solve for the missing base n: $103_n = 57_{nine}$ (3 marks)

24. a) simplify: $\frac{4.8 \times 0.3}{0.12 \div 4}$ (3 marks)

b) Express 0.2727…. as a common fraction in its simplest form. (2 marks)

25. a) Using a ruler and a pair of compasses only construct a triangle PQR such that PQ = 7.2cm , angle PQR = 120^0 and QR = 5cm. Draw a perpendicular line from Q to meet extension of PR at T. Measure height QT. (5 marks)

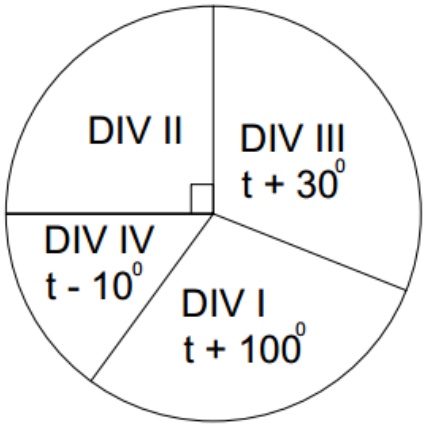
b) Measure QT (1 mark)

26. The mean of 3f – 5 , 27, f + 6 and 12 is 17

a) Find the value of f (3 marks)

b) Find the range of the numbers (2 marks)

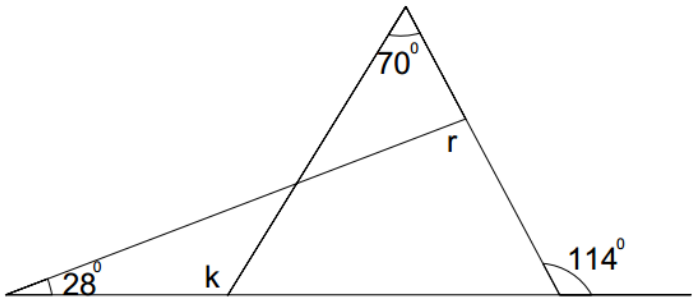
27. The pie- chart below shows the performance of a certain school in the mock exams, study it to answer the questions that follow.



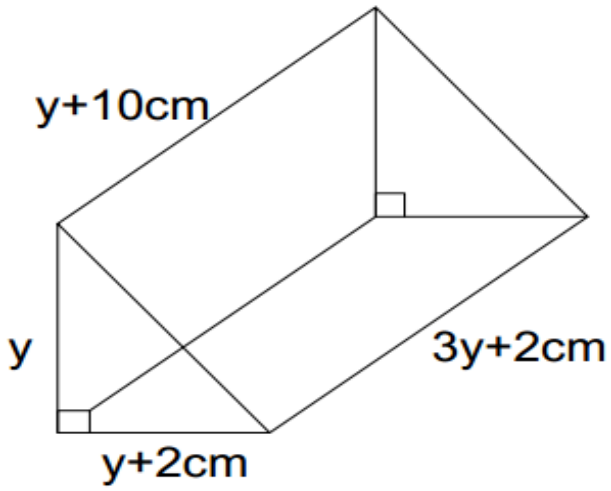
a) Find the value of t in degrees (3 marks)

b) If the total number of pupils who sat for mock is 108, how many pupils passed in division one? (2 marks)

28. Study the shape below and use it to find the value of r and k. (4 marks)



29. Use the triangular prism to answer the questions below



a) Find the value of y (2 marks)

b) Calculate the volume of the prism (3 marks)

30. a) Vicent's car consumes 6 litres of petrol to cover a journey of 40 km. what distance would it cover with 33 litres of petrol? (2 marks)

b) If each litre of petrol costs 4,000/= how much money will be needed to buy enough petrol to cover a journey of 110km? (3 marks)

31. Solve:

a) $\frac{t+6}{3}$ - 4 = 1 (3 marks)

b) $12 \leq 9 - 3x$ (2 marks)

32. Three men Muntu, Mugezi and Mugabi shared some money in the ratio 2:3:5 respectively. Mugabi got 90,000/= more than Muntu.

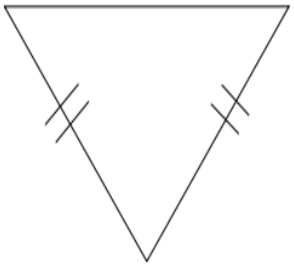
a) How much money did they share altogether? (3 marks)

b) How much money did Mugabi get? (2 marks)

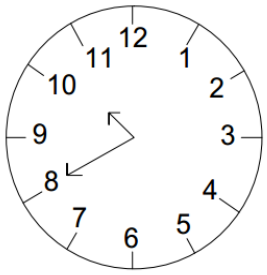
THE END.

SECTION A

1. Add: 172 +28
2. Given set A = {0, 2, 4, 8} and set B = {3, 7, 9}. Find n(AnB)
3. Simplify: -3 + $^{-}3$
4. Given that n = 3 and r = -2 . find the value of 2n + r
5. The number of subsets in set P = 32. How many elements are in set P?
6. A test which took $2\frac{1}{4}$ hours ended at 5:00 pm. When did the test begin?
7. Work out 3.0 ÷ 0.6
8. Find the next number in the sequence. 1, 2, 4, 5, 7, ……..
9. In a line of pupils a head boy was 9th from each of the line. How many pupils were in the line?
10. In the triangle below how many lines of folding symmetry has it?

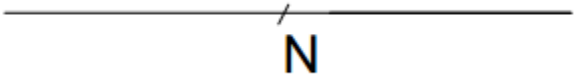


11. Namusoga walked 4 km in 1 hour and 20 minutes. Find the average speed in km/hr.
12. Write 99 in Roman Numerals
13. How many $\frac{1}{3}$ litre bottle can be filled from a 10 litre jerrycan of water?
14. Using the clock face below, write the morning time.



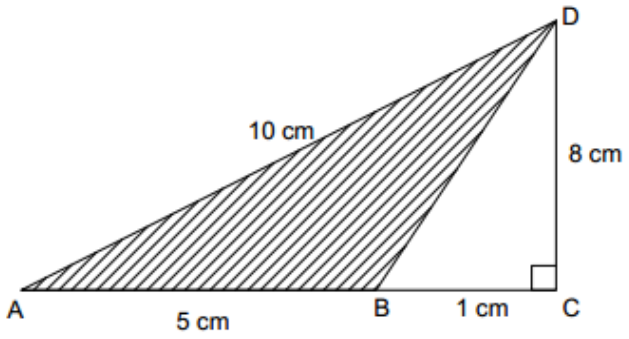
15. Increase sh. 20,000/- by 10%
16. Solve: 4X – 4 =16
17. Write 608.7 in scientific notation

18. Using a pair of compasses, a ruler and a pencil, construct 90^0 at point N



19. Mukanza bought a goat at shs. 100,000 and sold it at shs. 120,000, find her profit percentage

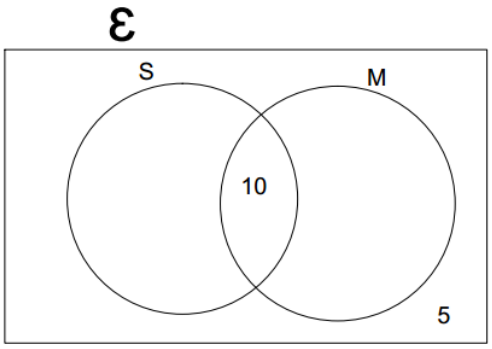
20. In the figure below, find the area of the triangle ABD



SECTION B

21. In a class of 50 pupils, 30 pupils like Science(S), 10 pupils like both subjects, K pupils like mathematics (M) only, and 5 pupils do not like any of the two subjects.

    a) complete the venn diagram below (2 marks)



    b) Find the value of K. (2 marks)

    c) If a pupil is selected at random, what is the probability of picking a pupil who likes mathematics? (1 mark)

22. a) In the space provided, construct triangle ABC where BC = 6 cm, angle ABC = 60^0 and angle BCA = 45^0.

    Drop a perpendicular from A to meet BC at T using a pair of compasses, a pencil and a ruler only. (5 marks)

b) Measure AT (1 mark)

23. Richard spent $\frac{1}{4}$ of his money on books, and $\frac{1}{3}$ on medical, he also spent $\frac{1}{5}$ on transport and saved the rest which was sh. 40,000/=

a) What fraction of the money was saved? (4 marks)

b) How much money did he have at first? (2 marks)

24. a) Solve: $-2X < 4$ (2 marks)

b) Solve: $2(2p - 1) - 2(p - 3) = 4$ (3 marks)

25. a) Change 1101_{two} to decimal (2 mark)

b) find the number which has been expanded below

$(6 \times 10^3) + (2 \times 10^1) + (3 \times 10^0)$ (2 marks)

26. On 23/11/2013, one kenya shilling was equivalent Ugsh 28.2 at City Bureau (selling). Find what was the equivalent to kenya shillings from the Uganda shillings 1833.

(3 marks)

27. a) Work out: $\frac{3}{5} \times \frac{1}{3} \div \frac{2}{3}$ (2 marks)

b) work out: $\frac{5.4 \times 9.6}{4.8 \times 7.2}$ (3 marks)

28. The sum of four consecutive odd numbers is 24.

a) Find these numbers. (4 marks)

b) Find their range (1 mark)

29. a) Express 72km/hr to metre per second (2 marks)

b) Engulu walked for 9km from 8:00am to 11:00am. Find his average speed in kilometres per hour (2 marks)

30. Below is a shopping bill which shows how Namutebi spent her money.

ITEM	QUANTITY	UNIT PRICE	AMOUNT
Rice	2 kg	Sh. 1200	Sh. k
Beans	4 kg	Sh. r	Sh. 2500
Tomatoes	1 kg	Sh.1000	Sh. n
Salt	X kg	Sh800	Sh. 400
	TOTAL EXPENDITURE		Sh. p

a) Find the value of each letter in the table. (5 marks)

b) If she got a balance of 10,000/= how much was there at first? (1 mark)

31. A piece of land is used as follows:

- 20 hectares of land for growing maize
- 15 hectares of land for growing bananas
- 25 hectares of land for growing coffee

Represent the above information on a pie- chart (use radius of 5cm) (6 marks)

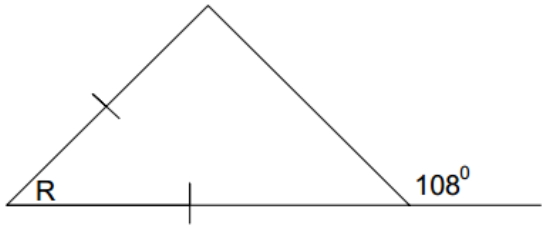
32. In Nabaswa sub county, 21000 people were registered as voters. The ratio of male to female voters was 2:3 respectively.

If $\frac{1}{4}$ of the male and $\frac{1}{5}$ of the female voted for Joyce, while the rest of the registered voters voted for Juma, how many votes did Juma get? (5 marks).

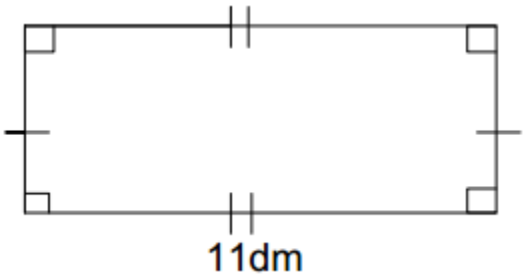
THE END.

SECTION A

1. Add: 123 + 52
2. Arrange 2, 0, -2, 5, 4 in ascending order
3. Solve for n: $1\frac{1}{3}\ n = 2$
4. Work out the size of angle marked R.

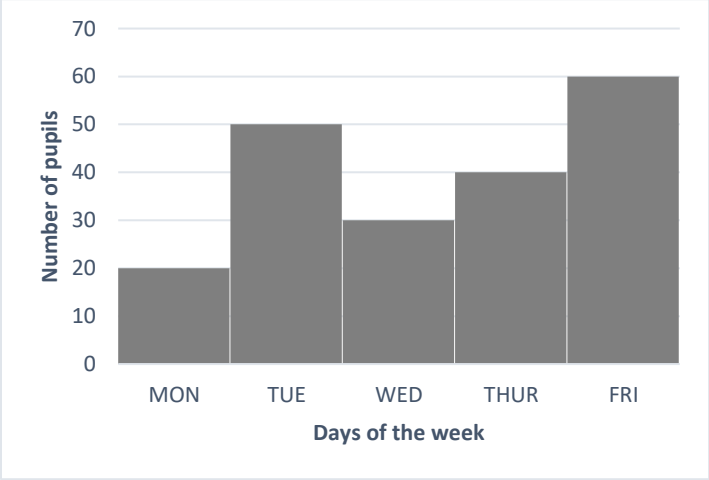


5. Express in figures: one million one thousand one
6. Given that K = {1, 3, 5}. Write all the possible subsets of K
7. The area of the rectangle below is 44dm^2. Find the width of the rectangle

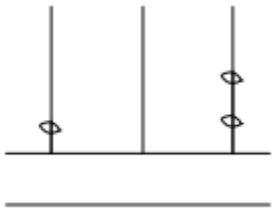


8. Simplify: 5m – n – 2m + 4n
9. Find the next number in the sequence:

   8, 9, 7, 4, 5, 3, 0, …….
10. The graph below represents the number of pupils who were present in a class of 60 pupils. How many pupils were absent in that whole week?



11. The area of a squared room is $2\frac{1}{4}$ m^2.what is the length of one side of the room?
12. A lorry covers a distance of 60km in one hour. What distance will the same lorry cover in 80 minutes if it travels at the same speed?
13. The abacus below shows a number in basic in base four. Write the number in base ten.



14. Given that m = 4 and P=n= -2. Find the value of: $\frac{m-n+P}{m}$
15. Gonzanga's watch makes an alarm after every 20 minutes and Muguluka's watch makes an alarm after 24 minutes. After how long will the two watches make alarms at the same time?
16. Divide 0.336 by 0.08
17. The price of shoes was shs. 15,000/= last month. This month the price of the same type of shoes increased by 40%. What is the new price of the shoes?
18. Using a ruler, a pencil and a protractor, draw an angle of 150^0 in the space provided below.
19. Work out: $1\frac{1}{3} - \frac{3}{4}$
20. Lorna and Helena shared shs. 4,800/= in the ratio 3:5 respectively. Find the amount received by each girl.

SECTION B

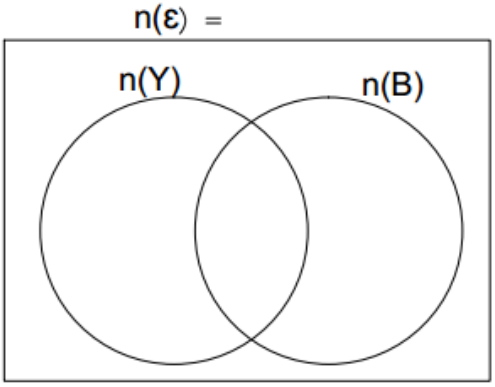
21. a) Solve for a and b given that $\frac{3}{4} = \frac{a}{16} = \frac{b}{12}$ (2 marks)

    b) Solve for F in the equation below

    4(F – 3) – (F – 2) = - 9 (2 marks)

22. in a club of 45 members, 28 members like Yellow colour n(Y), 3 members like neither of the club colours, X members like both colours. If 25 members like Blue colour n(B).

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



b) How many members of the club like both colours? (2 marks)

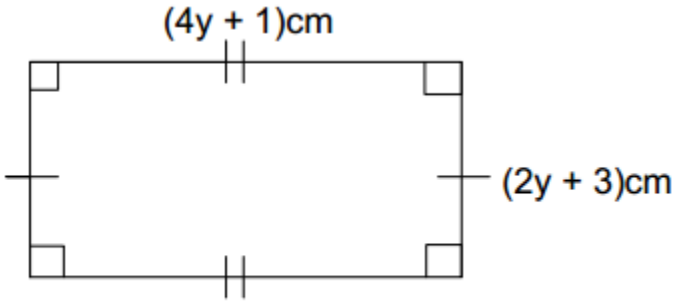
c) Find the members of the club who don't like blue colour. (2 marks)

23. a) Find the value of X in $104x = 130_{five}$ (3 marks)

b) Write the single number from from the expansion below. (2 marks)

$(4 \times 5^2) + (2 \times 5) + (3 \times 5^3) + (1 \times 1)$

24. a) The length of the rectangle is 17cm. find the value of y. (3 marks)



b) Calculate the area of the rectangle. (2 marks)

25. A farther gave his three children Kali, Kale and Kilo 400 hectares of land to share in the ratio of 3:2:5 respectively. Find how many hectares of land each child got. (4 marks)

26. a) Simplify: $\frac{108}{0.6 \times 0.24}$ (3 marks)

b) Akiki planted half of his garden with maize. He decided to intercrop $\frac{3}{8}$ of the planted maize with beans. What fraction of the shamba was left with only maize? (2 marks)

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

Currency	Selling rates to the Bank (Ug. Shs)	Buying rates from the Bank (Ug. Shs.)
1 US $	Shs. 2,000	Shs 2,400
1 K Shs.	Shs.20	Shs. 22

a) If Jena had US $ 230, how many Uganda shillings would she get from JEMPO Forex Ltd. (3 marks)

28. Muddu bought the following items from Sukku Supermarket on Saturday:

$2\frac{1}{2}$ kg of sugar at shs. 3,000/= each kg.

500gm of salt at shs. 1,000/= per kg

3 bars of soap at shs. 6,000/=

4 kg of maize flours at shs. 1,600/= per kg.

a) How much money did she spend on the items? (4 marks)

b) Muddu had a change of shs. 3,680/=. How much money did he have at the beginning? (1 mark)

29. a) With the help of compasses, a ruler and a pencil only, construct a triangle PQR where side PQ = 7cm, angle RPQ = 45^0 and angle PQR = 30^0. (4 marks)

b) Measure length QR in centimetres. (1 mark)

30. The table below shows the recorded ages of children who were immunized against polio from Mulago Hospital in 2009. Use it to answer the questions that follow.

Ages of children	4	6	3	5
Number of children				

a) What was their median age? (2 marks)

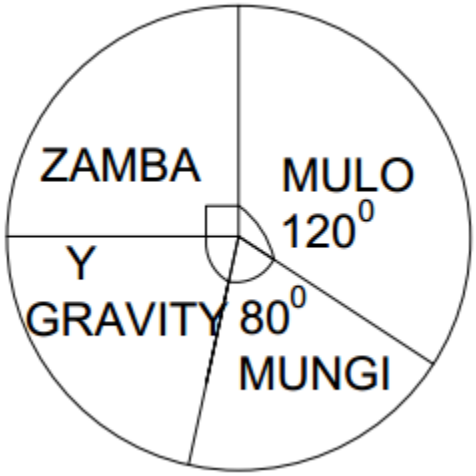
b) calculate the mean age of the children. (2 marks)

31. A vehicle travelled for 4 hours at a speed of 60 km/hr from Kuno to Budi and then returned to Kuno using the same road at a speed of 80km/hr.

a) How long did the vehicle take on the way while moving from Budi to Kuno? (2 marks)

b) calculate the average speed of the vehicle for the whole journey. (2 marks)

32. Gravity, Mulo, Zamba and Mungi shared a certain amount of money as shown on the pie-chart below. Use it to answer the questions that follow.



a) If Gravity received shs. 105,000/=, calculate the amount of money shared by the whole group. (2 marks)

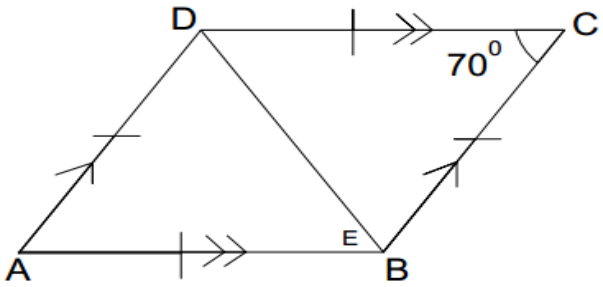
b) How much more money did Mulo get than Mungi? (3 marks)

c) What percentage of the whole money was received by Zamba? (2 marks)

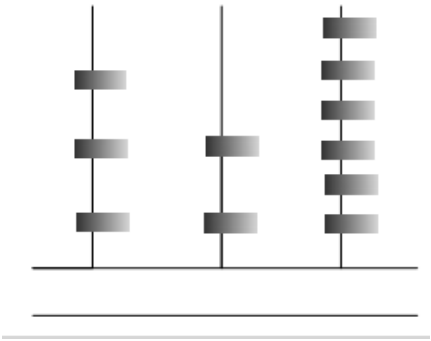
THE END.

SECTION A

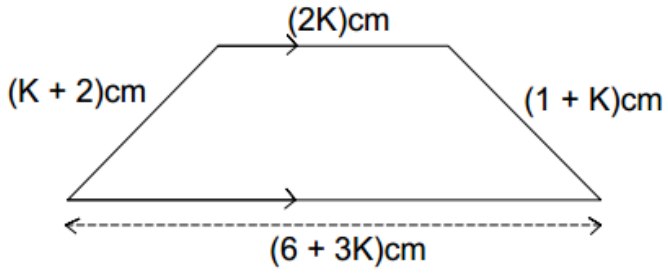
1. Work out: 2 – 1.4
2. Simplify: $\bar{2} - \bar{6}$
3. Solve for n: 1 ÷ n = 2
4. ABCD is a rhombus where angle BCD = $70^{0.}$ Find angle <E.



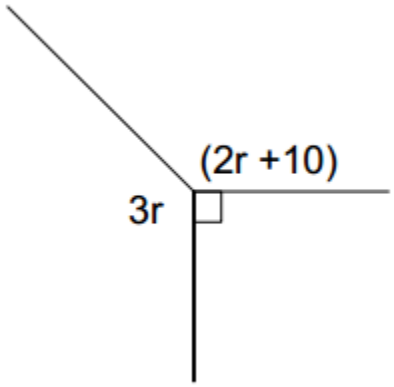
5. Write in words: 2002002
6. Given that K = {The prime factors of 12}. Find n(K)
7. Salima's monthly income of shs.36,000/= was raised in the ratio 5:3. What is her income per month?
8. Write down the place value of figure 3 on the diagram below



9. Give the next number in the sequence: 1, 6, 15, 28, 45, ……..
10. Write the equivalent of 999 in Roman Numerals
11. Workout: $\frac{3}{4} + \frac{1}{6}$
12. Keko stayed in bed for $2\frac{2}{3}$ hours. If she left her bed at 5:10p.m, when did she go to bed?
13. In the figure below, find its perimeter.



14. A taxi covered a distance of 360km in 2 hours and 15 minutes. Calculate its average speed in km/hr.
15. Given that a = d = -2 , b = -4 and c = 6. Find the value a + b + c
16. Using a ruler, a pencil and a pair of compass only, draw an angle of 150^0 in the space provided below.
17. If $203_n = 41_{five}$. what is the value of n?
18. Kitondo harvested 80 bags of maize from his farm last year. This year he has got 120 bags of maize. What is the percentage increase in the number of bags of his maize?
19. Find the square root of : $4\frac{33}{64}$
20. Study the figure below and use it to find the value of r



SECTION B

21. a) Work out: $\frac{4.32 \times 1.2}{0.18 \times 2.4}$ (3 marks)

    b) Express 356.32 in standard form (2 marks)

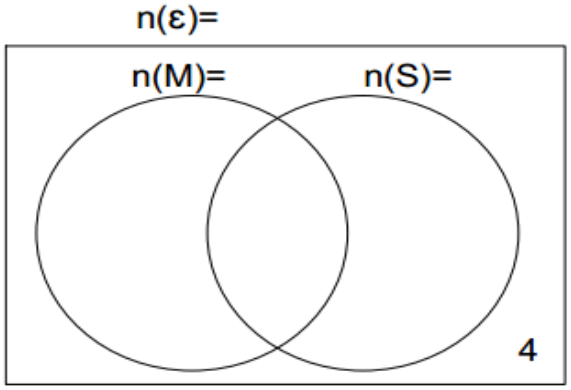
22. a) Add: 101_{two} to 1111_{two} (3 marks)

    b) What is the value of 2 hundreds + 8 tenth (2 marks)

    c) Write the place value of 7 in the figure 83.674 (2 marks)

23. In a class of 56 pupils, 16 like Mathematics (M) only, 2K like Science (S) only, 4 like neither of these of the two subjects and (30 – K) like both Mathematics and Science.

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



b) Find the value of K (2 marks)

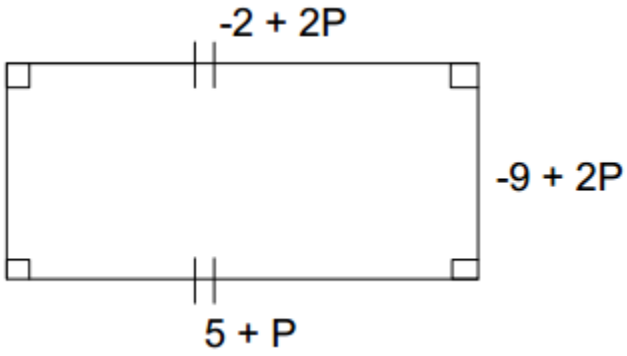
c) How many pupils like science? (2 marks)

24. Lutaya gave his three children Mayinja, Semakula and Nantume £12,000 to share in the ratio 2:5:3 respectively.

a) How many pounds were given to each child by their father? (3 marks)

b) How much more money in Uganda currency was given to Semakula than Mayinja? (Take £1 costs Ug.shs.3,560/=) (2 marks)

25. The figure below is a quadrilateral. Use the information given to answer the questions.



a) What is the area of the figure? (3 marks)

b) How long is the diagonal of the figure? (2 marks)

26. a) With the help of a pair of compasses, a ruler and a pencil only, construct a triangle ADP where side AD = 6cm, and angle PAD = 30^0, and angle ADP = 120^0. (4 marks)

b) Measure length AP in centimetres. (1 mark)

27. A bus uses 80 litres of diesel to cover a journey of 120km.

a) How much diesel is needed to cover a distance of 180km? (3 marks)

b) If the cost of a litre of diesel is shs. 3,270/=, how much fuel is needed to cover a distance of 180km? (2 marks)

28. Namusisi bought the following items from the supermarket.

$2\frac{1}{2}$ kg of sugar at shs.2,500/= each kg.

3 bars of soap at shs.10,500/=

6 packets of milk at shs. 1,500/= per packet

4 kg of meat at shs 8,000/= per kilo

250gm of salt at shs. 1,000/= per kg.

a) What was her total expenditure? (5 marks)

b) If she remained with shs. 2,800/=, how much money did she have at the beginning? (1 mark)

29. a) Solve: $3n + 2(n - 1) = 13$ (2 marks)

b) Solve the inequality: $P + 8 \geq 4P - 4$ (2 marks)

30. In New Lwoga Primary School, three bells ring at intervals of 15 min, 30 min and 40 min for infant, Middle and Upper classes respectively.

a) After what length of time do they ring together? (3 marks)

b) If they last rung at 2:00pm to mark the beginning of their afternoon classes, at what time do they go for lunch? (2 marks)

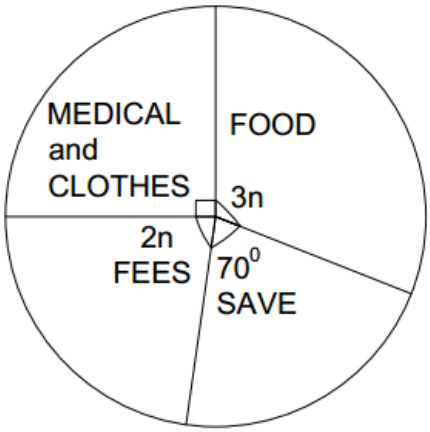
31. Given that set Z = {0, 8,16, 24, 32, 40,…}

The sum of four consecutive numbers in the set above is 368.

a) find the four numbers? (3 marks)

b) What is the median of the numbers? (2 marks)

32. The pie-chart below represents Kelekele's monthly salary expenditure. Use it to answer the questions that follow:



a) What is the value of n in degrees? (2 marks)

b) If Kelekele's monthly expenditure on fees is shs. 120,000/=, Calculate his monthly income. (2 marks)

c) How much of his monthly expenditure is spent on feeding? (2 marks)

THE END.