REVISION PAPER ONE

- 1. Write ' Four hundred and four hundredths' in figures
- 2. Simplify: $\frac{1}{6} + \frac{1}{9}$
- 3. Find the next number in the sequence

. 29, 18, 11, 6, 3, _____

- 4. Atim bought a dress at 80,000 /= and sold it at 100,000/=. What was his percentage profit?
- 5. Using a pair of compasses, a ruler and a pencil, construct an angle of 75°
- 6. The radius of a circular compound is 7 meters. Calculate the area of the compound. ($\Pi = 22/7$)
- 7. If K + 3 = 1 (finite 6). Find K
- 8. Share 1200 in the ratio 4:5
- 9. Express 0.1818.... as a common fraction
- 10. Decrease 800 by 15%.
- 11. What integer is represented by letter K.



- 12. Work out: 13 X 4
- 13. Given that p = -3, g = -5, y = -2; calculate the value $p^2 g^2 + y^2$
- 14. Find the value of $(2.5 \times 8.5) + (2.5 \times 1.5)$, using distributive property only
- 15. .If Agatha closes her eyes and picks up a potato from a bag. What is the chance of picking a potato of weight 7kg given that each potato in the bag weighs 2kg?
- 16. The exterior angle of a regular polygon is 30°. How many sides has the polygon?

17. Draw a perpendicular bisector of the line below.



- 18. A football match between Cranes and Eagles was played from 4.30pm to 6.15. How long did the match last?
- 19. Birakwate deposited shs. 80,000 in Stanbic Bank Mpigi Branch, which offers an interest of 9% p.a. How much interest did he receive from the bank after 6 months?
- 20. Round off 14.803 to the nearest whole number
- 21. Given that sets A = $\{1, 2, 3, 5, 6\}$, B = $\{1, 2, 7, 8\}$, find (A \cap B)
- 22. Simplify: 1/4 + 3/5 7/15
- 23. Mututu's car uses 5 litres of petrol every 25km. How much money will he spend on petrol for a 200km journey if petrol costs shs. 1800/= per litre?
- 24. Add: 0.04 + 2.33 =
- 25. Simplify: ⁻3 + ⁻8
- 26. Change 26_{ten} to base four.
- 27. Find the H.C.F. of 20 and 24.
- 28. Find the sum of $\frac{1}{4}$ and $\frac{1}{3}$.
- 29. Given that set $A = \{a, b, c, d\}$. How many subsets has it got?
- 30. How many liters of paraffin can be obtained from a jerrican of 5000 cm^3 ?

SECTION B

31. In a class of 120 pupils, 55 passed mathematics(M), 38 Passed science(S), 52 passed English(E), and 4 passed all the three subjects, 14 passed both mathematics and science ,9 passed both science and English, 15 passed both mathematics and English while y failed all the three subjects.

Find the value of y.	
Find the probability of picking a pupil who likes at least two subjects	
2. Given below are posting charges of various items	
Letters:	
unit or less	
20gms)sh 500	
ach additional	
nitsh 300	
rinted papers:	
unit or less	
50gm)sh.200)
ach additional	
nitsh.10	0
erogrammes	
nchsh.300)
What would be the cost of posting the following? I) 2 letters each weighing 110g	
II) 3 printed papers each weighing 325g	
III) 5 aerogrammes	

33 Using a ruler and a pair of compasses only, construct a triangle ABC where AB=6cm, BC=8cm and AC=7cm. Drop a perpendicular line from C to meet AB at D.

a. Measure the length DC

a) Represent the information on a Venn diagram.

b. Calculate the area of triangle ABC.

34 Boatman sailed from Island P heading to island Q which is East of P and 12km away, then he continued on bearing 135° to island R 8km away.

- a. Using a scale of 1cm to represent 2km, construct the route of a boatman.
- b. Find the shortest distance between P and R.
- c. Find the bearing of R from P.
- 35 The table shows Wendell's shopping bill. Use it to answer questions that follow

Item	Quantity	Cost per kg	Amount
Rice	½ kg	1400/=	
Meat	2kg		7000/=
Sugar	4kg	1600/=	
Tomatoes		800/=	1600/=
TOTAL			

- a. Complete the table
- b. If Wendell had 20,000/=. Calculate the balance.
- 36 The table below shows the height of various children in P.7 class in feet.

Height in	140	130	150	160
cm				
No. of	2	3	4	1
children				

- a) What is the total number of children in the class?
- b) What is the modal frequency of the heights?
- c) Calculate the mean height of the class.
- 37 Telephone poles along a road are placed 20 metres apart.
 - a) What is the distance from the 1^{st} to the 30^{th} pole?
 - b) What distance in km does one cover from the 1st to the 30th pole?
- 38 Shamusa, Najjemba and Falidah shared 72 sweets among themselves in the ratio 3:4:5 respectively.

a. How many sweets did each child get?

a. Using a pair of compasses and ruler only construct a triangle KLM with line
KL = 7cm, angle LKM = 45° and KM = 6cm

b Measure length LM.

40 Study the rectangle below and answer the following questions



(6k + 8) cm



b Calculate the perimeter of the rectangle.

41 Mr Ofwono is a cook at a certain school and earns a salary of 96,000/=. The pie chart below shows how he spends his monthly salary.



a How much does he spend on food?

b How much does he save?

c What fraction of his salary doe she spend on clothes?

42 A man shared sh.15,000 among his three children Joweria, Jaria and Halima such that Joweria gets sh.1500 more than Jaria and Halima gets sh.3000 less than Joweria. How much does each get?

REVISION PAPER TWO SECTION A

- 1. Using a ruler and a pair of compasses only, construct an angle of 240°
- 2. Write 1011 in words.
- 3. If Set $P = \{1, 2, 3, 9\}$, $Y = \{2, 5, 6, 10\}$. Find n(PUY).
- 4. Find the average of the following: X, (X + 2) and (X + 1)
- 5. Find the value of M in the figure below



- 6. The median of 3 consecutive counting numbers is 5. Find the product of the numbers.
- 7. Jenny received 4,000/= from her daddy. If Lucy received 2,500/= more than Jenny, how much did they get altogether?
- 8. Work out: $\frac{x^5 X x^3}{x^6}$
- 9. A box contains 36 green and blue pens. If the probability of picking a green pen at random is 1/3. How many blue pens are there?
- 10. Work out: $30 + 10 \div 5$
- 11. Musa is x years old. His father is 20 years older than him. In five years' time, the father will be twice as old as Musa. How old is the father now?
- 12. Change to decimal base: 141 five
- 13. Divide 0.32 by 0.008
- 14. Express 72 cm as a percentage of 6 metres.
- 15. Find the square root of 2.25
- 16. There are 15 goats and 10 more cows than goats on Mukisa's farm. How many animals are there on the farm?

17. Calculate the value of p in the figure below.



18. Find the perimeter of the figure below.



- 19. A rectangle is 8cm by 6cm. Find the length of its diagonal.
- 20. Solve: ³⁄₄ x = 24
- 21. Find the value of n if $2^n = 64$.
- 22. Solve for x: $\frac{1}{2}(4x 2) = x + 2$
- 23. Calculate the simple interest on shs. 90,000/= banked for 3 years at a rate of 6% per year.
- 24. Solve: $\frac{2}{3} x 2 = 6$
- 25. Write in Roman numerals: 122.
- 26. An English lesson which lasted for 1 ¹/₂ hours ended at 1.00pm. At what time did the lesson start?
- 27. Round off 125.466 to the nearest tenth.
- 28. Subtract 2(x + 3) from 3(x + 1)
- 29. Express 50cm as a percentage of 2 meters.
- 30. Find the value of x in the inequality below: 3x 1 > 2.

SECTION B.

31 In the diagram below, PQR is an isosceles triangle. Study carefully and answer



- a) calculate the perimeter of the triangle PQR
- b) Work out the area of the triangle
- 32 rectangle has sides 20cm long by 15cm wide. If the length is increased by 40% and the width decreased by 20%. Find the percentage increase or decrease in the area.
- 33 Study the figure below and answer the questions that follow



- a. Find the area of the un-shaded part.
- b. Calculate the perimeter of the un-shaded part.
- 34 In a class of 36 pupils, 22 pupils do English (E), 15 do Mathematics (M), 8 do neither of the two and P pupils do both.
 - a. Represent this on a Venn diagram.
 - b. Find the value of P.
 - c. What is the probability a Venn diagram of picking a pupil at random who does only one subject?

35 The diagram shows a triangular prism



- a. Calculate the value of X.
- b. Find the total surface area of the figure.
- 36 Study the Venn diagram below and answer the questions that follow:



- a. find x
- b. find Y
- c. find the LCM of x and 60.
- 37 The table below shows the marks scored by a P.7 class at Wefene Primary School. Use it to answer the questions that follow.

Marks	75	30	25	35
No. of pupils	2	4	1	3

- a Find the number of pupils in the class
- b What is the modal mark?
- c Calculate the mean

38 The perimeter of the figure below is 46 cm.

x + 4

- a. Find the value of x
- b. Find:
 - i. the length
 - ii. the width
- c. Calculate its area.
- 39 A shop keeper bought 25 kg of salt at ahs. 10,000/=. He sold the salt at shs.600 per kg.
 - a Find the total amount he got from the sale of the salt.
 - b Calculate his profit after he had sold all the salt
 - c What was his percentage profit?
 - d How many more sweets did Najjemba get than Shamusa?
- 40 Mr. Omaido went to the market and bought various items as shown by the table below:

ITEM	COST PER ITEM	QUANTITY	AMOUNT PAID
Meat	Shs2400	3kg	(i)
Rice	Shs900	(ii)	Shs1800
Tomatoes	(iii) <u> </u>	0.5kg	Shs600
Onions	Shs600	1 ½ kg	(iv)shs

a. Complete the table

- b. If he went with shs20000, find is balance.
- c. Find his percentage expenditure.
- 41 A motorist covered part of the journey in 3 hours at a speed of 70km/hr. The rest of the journey was covered in 2 hours at a speed of 60km/hr. Find the average speed of the motorist for the whole journey.

42 The figure below is of a rectangle.



a Find the value of x.b Calculate the perimeter of the rectanglec What is the area of the rectangle?

REVISION PAPER THREE SECTION A

- 1. Given that M^* n means 2M n. find the value of 3^*-2
- 2. Find the value of: $(^+6) (^-4)$
- 3. Express 3 ¹/₄ kgs as grams
- 4. Mr. Mulongo was driving at a speed of 120km/hr. What distance did he cover in 10 minutes?
- 5. A primary school has a population of 576 pupils, if there are 12 classrooms, how many pupils are in each classroom.
- 6. Given that the perimeter of the figure ABCD is 28cm. Find the length CD.



7. Collect the likes terms and simplify: (2p - 2) + (X + 4)

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



Find x.

- 9. If a = b = 2. Evaluate $ab + b^2$.
- 10. Convert 2ttwelve to decimal base
- 11. Simplify 4.23 + 5
- 12. Work out 4 + 6 = ____(finite 8)
- 13. Simplify: 4/7 7/9 1 5/9
- 14. Find the sum of 314_{eight} and 506_{eight} .
- 15. Two similar cubes have their volumes in the ratio 2:3. If the volume of the smaller cube is 32cm^2 , calculate the volume of the larger one.
- 16. Simplify: (2y -3) (y + 3)
- 17. What is the size of angle marked X in degrees?



- 18. Write in words: 24,635
- 19. Nalwanga collapsed after running ³/₄ of the race. If she was to cover a distance of 3,000 metres, what distance did she cover?
- 20. Expand 35.24 using powers of ten.

21. Work out: <u>0.24 X 0.81</u> 0.036

- 22. If x = 25 and y = 75, find the value of: (x + y) + (x y)
- 23. A bicycle has a marked price of shs.120,000 in a shop. However it was sold on a cash at 20% discount. Find how much was paid for the bicycle
- 24. Write in words: 40004
- 25. What is the next number in the sequence? 2, 3, 5, 7, 11, 13, _____
- 26. Find the value of x: x 5 = 4(finite 7)
- 27. Express a speed of 20 metres per second into kilometers per hour.
- 28. Find the size of angle marked n in the figure below.



- 29. Find the volume of a cylinder whose radius is 14cm and height 11cm. (take $\Pi = 22/7$)
- 30. What number has been expanded to give: $(2 \times 10^3) + (4 \times 10^2) + (8 \times 10^1) + (6 \times 10^0)$

SECTION B.

31 The figure below represents a net of a prism. Study it carefully and answer the questions that follow



- a) Calculate the total surface of the prism above
- b) Work out its volume
- 32 bus drive drove at 60km/hr for 1 ½ hours, then he realized he was slow, so he changed the speed to 80km/hr to cover the remaining distance of 360 km.
 - a. How long did he take on this journey?
 - b. Calculate his average speed for the whole journey.
- 33 The post office charges sh.5,000 basic fee every month on every private telephoneUser and:
 - a. Sh.400 per minute for a telephone call within Uganda
 - b. Sh.2,500 per minute for a telephone call outside Uganda . How much does someone pay the post office after a month if he makes 17-five minute calls within Uganda and 4-four minute calls outside Uganda every month?

- 34 If the ratio of the interior to the exterior angles of a regular polygon is 5:1.
 - b. Calculate the value of the interior angle.
 - c. What name do you give this polygon?
- 35 Using a pair of compasses and a ruler only, construct a triangle XYZ in which XY = 4cm, YZ = 8cm, $\langle XYZ = 120^{\circ}$. Measure length XZ
- 36 In a club of 40 people, 24 play Hockey (H), 17 Volley ball (V), 8 play both Hockey and Volley ball.
 - a. Represent the information on a Venn diagram
 - b. Find the value y.
 - b. How many play only one type of game.
- 37 Find the value of q in the figure below.



b Find the value of x in the figure below.



- 38 a. There are three streams in a class with 24, 30 and 36 pupils respectively. Find the least number of books that each class can share without any remainder.c.How many books will each pupil get in the stream of 30 pupils?
- 39 In a class of 60 pupils, 36 pupils like Kiswahili and 42 pupils like Agriculture. R pupils like both subjects and 8 pupils like neither subjects.
 - a Draw a Venn diagram to show the above information.
 - b How many pupils like both subjects?

c Find the number of pupils who like only one subject. d If a child won a prize for excelling in the termly exams, what is the probability that the winning child like Kiswahili?

- 40 By using a pair of compasses and a ruler only, construct a triangle PQR in which PQ = 8cm, $<P = 30^{\circ}$ and $<Q = 45^{\circ}$ Measure: (a) $\nearrow PRQ$ (b) L e n g t h QR.
- 41 In the figure below, find the area of the unshaded triangle PXZ.



42 Kakumba left village X and drove Westwards to a village Y, a distance of 30km. He then drove Southwards from village Y to village Z, a distance of 24km and returned directly from Z to X.

a Using a scale of 1cm to represent 6km, draw an accurate diagram to show Kakumba's journey.

b Find the shortest distance from X to Z in kilometres.

REVISION PAPER FOUR

SECTION A

1. The average height of 4 children is 110cm. if one of them is 140cm, calculate the average height of the remaining children.

2. Solve and give the solution set of K in: $2k + 2 \le 10$

3. Express 20 cm as a percentage of 50 cm

4. The Venn diagram shows the number of the children who eat meat (M) and fish (F). Find the number of children who eat only one type of sauce.



- 5. Convert 12_{ten} to binary system
- 6. Brenda slept at 8:45pm for 8 ¹/₂ hours. What time did she wake up?
- 7. Factorise completely: $4x^2y 2xy$

8. Find the distance around the shape below.



9. Simplify: 638 + 62

- 10. Write 30307 in words
- 11. Find the next number in the sequence 10, 14, 18, 22, 26,
- 12. If a = -1 and b = 3, find the value of $\underline{a^2b}$

13. Round off 24.09 to the nearest tenths.

14. Six books cost 4,800/=. How many such books will be bought with 16,000/= at the same rate?

15. Express 50g as a ratio of 1kg

16. Subtract 0.99 from 99

- 17. Find the LCM of 9 and 12
- 18. Find the volume of the triangular prism below.



- 19. Write 90,090 in words
- 20. Write 49 in Roman numerals
- 21. Solve: 8 d = 11

22. A man started his journey on Monday morning at 8.15am and arrived at his destination at 1.10pm. How long was his journey?

23. In the Venn diagram, shade Y - X



24. On the grid below, plot A (-3, -2)

										_
				2						
				1						
-4	-3	-2	-1	0	1	2	3	4	5	
				-1						
				-2						
				-3						
				-4						

25. Given that set $B = \{a, b, c\}$. How many proper subsets has set B?

26. Peter walked 0.15km. What distance did he cover in metres?

27. Charles deposited 200,000/ in Stanbic Bank for 2 years at an interest rate of 5% per year. What interest did he get after 2 years?

28. Express 49 in Roman Numerals

29. Find the Greatest Common Factor (GCF) of 12 and 15.

30. Round off 79.53 to the nearest whole number.

SECTION B (70 MARKS)

31. In a video hall which attracted 48 boys, 30 of them supported Man U (M), x supported Arsenal (A) only, 4 supported both teams while two did not support any of the teams.

- (a) Represent the information on a Venn diagram.
- (b) Find the total number of boys who supported Arsenal.

32. The table below shows the marks scored by a group of pupils in a maths test.

Х

f

Marks	No of pupils	Total
5	3	15
7		14
1	1	1
	4	36

a. Complete the table above correctly.

b.How many pupils did the test? c.What was the modal mark?

d.Work out their mean mark.

33a. Given that $a = 1 \frac{1}{2}$, $b = \frac{3}{4}$, and $c = 2 \frac{1}{2}$, evaluate: $c + a \div b$

(b) Solve: 3(2X-2) - 3(X-2) = 12

34. Using a ruler, a pair of compasses and a pencil only, construct a triangle ABC in which AB = 8cm, angle $CAB = 30^{\circ}$ and angle $ABC = 90^{\circ}$

Measure (i) \overline{AC}

(ii) $\angle BCA \setminus$

35. A tank has two taps that pour water into it. Tap A turned on alone and fills that tank in 20 minutes. Tap B turned on alone fills the tank in 10 minutes.

- a. How long will the two taps turned on at the same time take to fill the tank?
- b. If both pour 36 litres of water per minute, what amount of water will the tank hold when full?

36. Asiimwe has various amount of money in the following currencies:

500 Kenya Shillings (K shs)

200 United States Dollar (Us \$)

300,000 Uganda Shillings (Ug. Shs)

The exchange rates are:

Us \$ = Ug Shs 1850

K sh 1 = Ug Shs 250

37.

- a) Find the total amount of money in Uganda shillings Asiimwe has/
- b) If Asiimwe has Kenya shillings and wants to buy a cassette of 80,000 Ug shs, calculate his balance
- c) Below is a cylindrical piece of wood after drilling a hole in it. (Use $\pi = 22/7$)



a. Find the volume of the material removed to drill the hole.

- b. Find the volume of the wooden cylinder left.
- 38. A man left his home at 7.00am riding a bicycle and arrived at his place of work 25

km away at 9.30am.

a. Find his average speed.

b. If he left his place of work at 5.00pm, riding at an average speed of 15km per hr, at what time did he get home?

- 39. The mean of the scores: 8, 7, 6, 5, (a 5) is 6
 - a. Find the value of a.
 - b. Find the range of the scores.
- 40. Find the range of the scoThe table represents how Mr. Muloki spends his salary.

Items	Car expenses	Food	School fees	Savings	Others
Percentage	15%	20%	x%	15%	10%

a. Find the value of x

b.If he spends shs. 600,000 on others, calculate his salary. Draw a pie-chart to represent the above information 41. A school uses two bells which ring at intervals of 30 minutes, 40 minutes respectively. The bells first ring together at 8:30am. When will they ring together again?

42a. On the grind below, plot the following co-ordinates: J (0,0), K (+2, +2), L (5,0), M (+2,-2).



ii) Join J to K, K to L, L to M and M to J and name the formed polygon

REVISION PAPER FIVE

SECTION A

- 1. A car moves 24 km in 20 minutes. How far does it go in 1 hour?
- 2. Given that 1 US dollar = Ug Shs. 1800 and 1K Sh = 24 Ug shs. Sister Rose bought a car worth 1200 US dollars. How much was this in Kenya shillings?
- 3. Write LXV in Arabic numerals
- 4. Solve: 2m + 6 = 22

5. Find the size of angle K.



- 6. Work out the sum of the value of 7 and 8 in 4789
- 7. Set $R = \{2, 4, 6, 8\}$ and set $Q = \{1, 2, 3, 4, 5, 7\}$. Find n(RUQ)
- Obama deposited shs. 720,000 in a bank which given a simple interested rate of 4% per annum. Find his interest after 9 months.
- 9. Write 194 in Roman numerals
- 10. Simplify: $^+2 ^-3$
- 11. Change 1011_{two} to base ten
- 12. A motorist covered 90 km in 1 hour and 30 minutes. Calculate the average speed of the motorist
- 13. Namara borrowed shs. 50,000 from a bank which charges a simple interest of 18% per year. How much interest will she pay after two years?
- 14. Six men can do a piece of work in 12 days. How many men will do the same job in 8 days working at the same rate?
- 15. In a box there are 5 blue buttons and 7 red ones. What is the probability of picking a red button at random?
- 16. Work out 3 5 = (finite 6)
- 17. Divide 327 by 3
- 18. Add: 213 + 64 =
- 19. Simplify: -6 -6 =
- 20. Work out the range of 5, -1, -9, 4 and 1
- 21. Study the sequence and find the next number: $\frac{1}{16}$,
- $\frac{1}{16}, \frac{1}{8}, \frac{1}{4},$
- 22. Find the circumference of a circle whose diameter is 14
- 23. Solve for X: 6 < 3X < 15
- 24. Increase 900 in the ratio of 3:2
- 25. Using a ruler, a pencil and a pair of compasses, construct an angle of 45°.
- 26. Find the mean of a, a + 2, a + 1
- 27. Today is Tuesday. What day of the week will it be after 40 days?
- 28. Find the sides of a square whose area is $3 \frac{1}{16} \text{ cm}^2$
- 29. Divide 2727 by 3.
- 30. In a class of 20 pupils, 3 are girls. Express the ratio of boys to girls in the class.

SECTION B

31.a Solve: x - 1 = 2x + 5

b. Solve the inequality: 3(2-x) > 15

32. In a class of 60 children, 25 take both milk (M) and porridge (P), 40 take porridge, x take milk only and 3 of them take neither of the foods.

c. Complete the Venn diagram below.



e. How many children take one type of food only? 33. Gerald divided a certain amount of money amongst his three sons: Jim, John, Jackson in the ratio 2:3:5 respectively. If John got sh. 24,000, how much money did the father give to his sons?

34. Tendo went to Baredene super market and made the following purchases:

2 ¹/₂ Kg of sugar at shs. 1600 per Kg

4 bars of soap at shs. 1200 a bar

2 reams of ruled paper at shs. 14000

500g of tea leaves at shs. 1200 per kg

- a) How much money did he spend altogether?
- b) If he went with 30,000/, calculate his balance if he paid the full bill.

35. Using a ruler, a pair of compasses and a pencil only. Construct a square ABCD of length 4cm.

36. A packing industry packs tins of type A in boxes of type B shown below.



f. How many tins of A can be packed in box B.

g. Find the volume of the packing material to be filled in the empty space.

37a. Work out: $3 - 4 = \pmod{7}$

(b) If today is Tuesday. What day of the week will it be after 92 days from now

38. Joseph sweeps $\frac{1}{4}$ of a compound, Milly sweeps $\frac{3}{5}$ of the same compound and Susan sweeps the rest.

- (a) What fraction does Susan sweep?
- (b) If Susan sweeps 21 square metres, how big is this compound?
- 39. A man left his home at 7.00am riding a bicycle and arrived at his place of work 25 km away at 9.30am.
 - a. Find his average speed.
 - b. If he left his place of work at 5.00pm, riding at an average speed of 15km per hr, at what time did he get home?
- 40. Study the Venn diagram below ad answer the questions that follow:



- a) Find the value of x
- b) Find the value of Y
- c) Work out the G.C.F of F_X and F_{16}
- d) what is the L.C.M. of F_X and F_{16}

41. Tap P can fill a tank in 4 minutes. Tap Y can fill the same tank in 6 minutes. How long can both taps take to dill the same tank working the same rate?

b) 12 men take 4 days to paint a certain building. How many men can paint the same building in 6 days when working at the same rate?

42. The figure below is of a rectangle:



$$(3p - 7)$$
 cm

- a) Find the value of p in cm
- b) Calculate the area of the rectangle

REVISION PAPER SIX

SECTION A

- 1. Solve $\frac{3}{5}(x+2) = 6$
- 2. Work out: 164 + 23
- 3. Write in words: 40884
- 4. Ronnie scored the following marks In darts competition: 7, 6, 5, 8, 9, 4, 6. What was his range mark?
- 5. What number has been expanded

 $(7x \ 10^1) + (8 \ x \ 10^0) + (5 \ x \ 10^{-1}) + (6 \ x \ 10^{-2})$

6. Find the volume of the container in litres. (take $\pi = 22/7$)



- 7. Using a pair of compasses, pencil and ruler only, construct an angle of 135° in the space provided
 - 8. Find the value of x in the figure below.



Work out the value of the third angle from the figure above.

- 9. Solve 4x 8 = 2x
- 10. Find the square root of 1.96
- 11. Calculate the mean of 8x, 9, 11 and 4x
- 12. Express 20 metres into kilometers.
- 13. Given that K = {1, 2, 3, 4, 5} and M= {1, 3, 5, 6, 7} Find n(KUM)
- 14. 1An article was bought at 15,000/= and was sold at 18,000/=. Find the percentage profit made.
- 15. Using a ruler and a pair of compasses only, construct an angle of 45°.
- 16. At a party, there were 714 guests. The ratio of men to women was4:3 respectively. How many men attended the party?
- 17. The bearing of Bubaare from Nyabuhoro is 075°. What is the bearing of Nyabuhoro from Bubaare
- 18. Given that A = 2, 3, 4, 5, B = 0, 1, 2, 3, 4 Find n(B)
- 19. Work out: $101_{two} + 11_{two}$
- 20. Find the least number that is exactly divisible by 9 and 12 leaving a remainder of 2.

- 21. Ogwal scored 35 marks out of 175 marks. Express his score as a percentage.
- 22. Simplify: (3X + 5) (X 1)
- 23. Use distributive property to work out: $(4.3 \times 3) + (5.7 \times 3)$
- 24. Find the size of angle X



- 25. Solve 3P + 4 = 13
- 26. Find the area of the figure below:



27. Add: 6.5 + 23.7

- 28. Write 13_{ten} to binary system
- 29. Add: ³⁄₄ + ¹⁄₄

30. Set $A = \{1, 2, 3, 5, 6, 7, 10\}$, Set $B = \{1, 4, 6, 8, 10, 11\}$. Find $A \cap B$.

SECTION B (70 MARKS)

1. In a class of 20 pupils, two languages are spoken. 14 speak Luganda (L), 15 speak Kiswahili (K).

- h. Draw a Venn diagram and show the information given.
- i. Find the number of pupils who speak both languages.
- j. If a child is picked at random, what is the probability of picking a child who speaks only Luganda?

32a. Simplify: <u>2.7 x 0.12</u>

0.09

- b) Work out: $\frac{2}{3} + \frac{1}{2}$ of $\frac{6}{7}$
- 33. The table shows the marks scored by some pupils in a series of tests in a class"

Marks scored	3	8	7	9	6
No. of pupils	4	2	5	1	3

a) How many pupils are in class?

b) Find the modal score

c) Calculate the mean score.

34. A taxi to Jinja town travels at an average speed of 50kph for 100km and then another 80 kph for 120km and then another 80kph for 120km. Find the average speed for the whole journey.

35. Hannah went shopping with shs. 20,000 and bought items as shown in the table below:

Item	Quantity	Unit price (shs)	Total cost (shs)
Meat	2 kg	4000 per kg	8000
Sugar		1600 per kg	4800
Rice	4 kg		800
Salt	2 ½ kg	300 per ½ kg	5,200
	•	Total	

a) Complete the table

b) If she was given a discount of 20%, how much did she pay?

36. Using a pair of compasses and a ruler only, construct triangle ABC in which

AB = 6.4 cm, angle $CAB = 90^{\circ}$ and AC = 3.6 cm.

- b. Measure BC.
- c. Angle CBA
- 37. Use the figure below to answer the questions that follow.



a. Find the value of x

- b. Calculate the perimeter of the rectangle above.
- c. Calculate its area.
- 38. Ben spends $\frac{2}{3}$ of his income on food and $\frac{1}{5}$ of the remainder on rent and saves the rest. If he saves shs. 44,800, find Ben's income.
- 39. The grazing land is used as follows:
 - 0.5 hectares are occupied by cows
 - 0.125 hectares are occupied by goats
 - 0.25 hectares are occupied by sheep

The rest of hectares are reserved for other purposes.

- a) Represent the above information on a pie chart. (use a radius of 4 cm)
- b) What percentage of hectares are reserved for other purposes?

40. Given that y = 2x - 1

a) Complete the table:

Х	0	1	2	3	4	5
Y	-1	1				

b) Plot the points given in the above table on the graph below:

					1											
					12											
					10											
					9											
					8											
					7											
					6											
					5											
					4											
					3											
					2											
					1											
5	4	3	2	-1	0	1	2	3	4	5	6	7	8	9	10	
					- 1											
					2											
					-3											

41. solve the inequality: $13 \ge 3x - 2 \ge 4$

(b) Give the possible solution set for the inequality in (a) above.

42. Maria distributed shs. 600,000 among her daughters. Mary, Jane and Janet in the ratio of 2:3:5 respectively.

- a) How much did Janet get?
- b) How much more was given to Jane than to Mary?
- c) What percentage of the total amount was given to Jane?

REVISION PAPER SEVEN

SECTION A

1.Simplify: ⁻2 - ⁻6

2.Add: $^{9}/_{11} + ^{2}/_{3}$

3.Evaluate $2n^2$ of n = 5

4.Write 700,070 in words

5.Calculate the mean of 8x, 9, 11 and 4x

6. What is the GCF of 8 and 15?

7. Work out: 0.5 x 1.2

8. The chart below shows the number of books in P5 class which has three streams.





How many books are in the P5 class altogether, if each

books?

- 9. Find the value of x if $34_x = 19_{ten}$.
- 10.Evaluate: $\frac{0.08+0.9}{0.5-0.01}$
- 11. Work out: 2(3q 4) = 16
- 12. Change XLIX to Hindu Arabic numerals
- 13.Simplify: -9 + 4

The cost of 3 books is sh 2,400. Find the cost of 8 similar books

- 14. Odoi covered a distance of 60 km in 2 hours. Calculate the speed at which he moved.
- 15. Given that n = -3, find the value of $4n^2$
- 16.Shade Set P in the diagram below:

17.A school uses 215 boxes of chalk in a term. How many boxes will it use in 3 terms? p



18.A school uses 215 boxes of chalk in a term. How many boxes will it use in 3 terms?

19. Find the area of the figure below in $\rm cm^2$



20.Find the perimeter of the figure below:



21.Express 123_{five} in decimal system

22.Simplify: $\frac{1}{2} - \frac{1}{4} + \frac{2}{3}$

23. The average age of 6 men is 37 years. If one of them is 42 years, calculate the age of the other 5 men.

24.Add: 469 + 531

25.Change 4 ¹/₂ kg into

grams 26Work out: 14 + 6

X3

27. Increase 144 by 54

28. Write "seventeen thousand six hundred twenty" in figures.

29.Divide 16032 ÷ 8

30. The area of a square is 144dm². Calculate the perimeter of the square.

SECTION B

31. In a class of 72 pupils, 11 pupils like both mirinda (M) and pepsi (P), 6 pupils like neither mirinda nor pepsi. If X pupils like mirinda only and 40 pupils like pepsi ;

a) Show the above information on a venn diagram.

How many pupils like only one type of brand

32. Using a pair of compasses, a ruler and a pencil only, construct a parallelogram ABCD

in which AB = 8cm, BC = 4cm and angle $ABC 120^{\circ}$

b) Measure diagonal BD

33. In a P6 class of 60 pupils, 40 belong to Holy Childhood Club (H), 30 belong to Environmental Club (E) while y pupils belong to both clubs and 5 belong to neither of the clubs.

a) Represent the information above on a Venn diagram

b) How many pupils belong to both clubs?

C) If a pupil is picked at random, what is the probability that he belongs to Holy Childhood club only?

34.A wheel of diameter 70cm is rolled along a path at a speed of 20 revolutions per minute.

a) Calculate the distance it covers in one revolution. (Take $\pi = \frac{22}{7}$).

b) How far in kilometers does it go in one hour?

35. Given that $\frac{1}{2}$ of Opio's salary is equal to $\frac{2}{3}$ of Seremba's salary.

a) Find Seremba's salary if Opio's salary is sh.9,000/=

b) Express Seremba's salary as a percentage of Opio's salary

36. Kamunda travels from his home to Kampala as follows: for the first two hours, he travels at a speed of 30k.p.h to Town A for 30 minutes. He then travels from town A to Kampala at a speed of 60k.p.h for 2 ½ hours.

- a. Show the above information as a travel graph showing his home, town A and Kampala.
- b. How far is town A from Kampala?

37. Tom went to Bunamwaya Market and bought the following items with a fifty thousand shilling note:

1 ½ kg of rice at sh.3000

3 bunches of matooke at sh. 4500 each bunch

250gm of tea leaves at sh.1200 a kg

 $4 \frac{1}{2}$ kg of sugar at sh.1600 per kg.

- a. What was Tom's total expenditure?
- b. If he was given a discount of 10% on his expenditure, how much was his balance?

38. Given the equation 2x = y - 1. Complete the blank space in the table.

 ie equan	j	ii eompioie				
Х	-2		0	••••	1/2	
Y		-1	1	3		7

39.A father gave put 135,000/= as pocket money to his 3 sons;

John, Moses and Peter on the ratio 2:3:4

- a. How much money sis each get
- b. What percentage of the amount was received by Moses?
- c. The sum of 3 consecutive odd numbers is 99. What are the numbers?
- d. Find the sum of the first number and the third number.

40. Mr. Kawuku spends his monthly salary as follows: Food - 448,000/=, Fees - 42,000/=, Leisure - 18,000 and Transport - 36,000/=. Draw an accurate pie chart of radius 5 cm to show the above information

41. Tap A can fill a tank in 4 hours. Tap B can fill the same tank in 3 hours, while tap C can empty the same tank in 6 hours. How long will it take the 3 taps to fill that very tank if they are opened at the same time?

42. The figure below is a rectangle, use the information give to:

- a) Find the value of x
- b) Calculate the area
- c) Work out the perimeter.



(2x + 1) cm

REVISION PAPER EIGHT

SECTION A

1. Express 600 grammes to kilogrammes

2.Express 25% as a simplified ratio.

3.Solve: 3x - 5 = 22

4.By selling a cow for 320,000/=, James made a profit of 80,000/=. Calculate his cost price.

5. From the Venn diagram below, list all members of set K



6. At what speed should Mr Kigingo drive his car if he is to cover a distance of two hundred kilometres in two hours and thirty minutes?

7. If the angles $(x + 20)^{\circ}$ and $(x - 40)^{\circ}$ are complementary, find x.

- 8.Simplify: $2^3 \times 2^2 \times 2$.
- 9.Calculate the number of proper subsets Set R has if $R = \{a, e, i, o, u\}$

10.Divide $1 \div 5 =$ (Mod 7)

- 11.Simplify: ½ of ¼ + ^¾
- 12.Add: 3.2 + 2.9
- 13. Find the value of a in the figure below:



14. Find the square root of 0.25

- 15. The radius of a circle is 9 cm. what is the length of its diameter?
- 16. The headmistress gave 105 pens to 5 pupils to share equally. How many pens did each get?

17. Arrange -2, 3, 0, 5, -6 in a descending order.

18How many ½ litre cups of water can fill a 10 litre jerrycan?

19. What number was prime factorized to get $\{2_1, 2_2, 3_1, 5_1\}$?

20. Work out (6x4) + (6x3) using the distributive property only

21. Remove the brackets and simplify: 6(m + 2) + 3(m +1)

22. Given that $24_x = 42_{five}$, find the value of x.

- 23. I think of a number, multiply it by 2 and add 6 to the result, the answer is 18. What is the number?
- 24Work out: 1.02 0.02

25The figure below is an isosceles triangle; calculate the size of angle marked P

<u>/(3x - 10)°</u>

Find the value of X in the figure

26.Solve ¼x − ⅓ = ½.

27. Solve for X: $\frac{x}{2} = 6$

28. Work out the range of the following integers: ⁺4, 6, -1, 0 and -9

29.Shade (PnQ)¹

30. Round off 25.98 to the nearest tenth.

SECTION B

31. In a class of 60 pupils, 3/5 of them are girls.

- a) What fraction of the class are boys?
- b) How many boys are in the class?
- c) Express the number of girls as a percentage of the whole class.
- 32. The volume of a cylinder is 4,400cc.
 - a) How many litres does it hold?
 - b) If its base is 100 cm², calculate its height.
- 33. Ndaruzi wnt to Kyanyana market and bought the following items:
 - 3 Kg of sugar at shs 1,500 per Kg.
 - 1 ½ Kg of rice at shs 1,400 per Kg,
 - 1 ½ litre of paraffin at Shs. 1,000 per litre.
 - 8 apples at shs 500 per apple.
 - a) Calculate her total expenditure
 - b) What was her balance if she went with a twenty thousand shillings note?

34. Using a ruler, a pencil and a pair of compasses only, construct a triangle XYZ in which <XYZ = 30°, side YZ = 6cm and <YZX = 120°. Measure side YX.

- 35. The ages of three children in a certain class are (x + 3) years, (3x 10) years and
- (2x + 5) years. If their total age is 34 years, find te age of the eldest child

36. In a primary school of a population of 1800 pupils, there are three bells used fornursery,

lower section and upper section. They ring in intervals of 30 minutes, 40 minutes and 50 minutes respectively.

- a. After how many minutes will all the three bells ring together?
- b. If they ring at 10:00am, when will they ring together again?
- 37. Using a ruler, a pencil and a pair of compasses only, construct a triangle MTN in which

TN = 4.5cm , \angle MTN = 120° and \angle TNM = 30°.

38. In a school, there are 600 pupils with 20% more boys than girls.

- a. What percentage are the girls?
- b. Find the number of boys in the school.
- c. Express the number of boys as a ratio to the number of girls.

39. The table below shows marks obtained by some pupils in a class. Use it to answer questions that follow.

Marks	40	50	60	80
No. of pupils	4	2	3	1

- a. How many pupils did the test?
- b. Calculate the range of the marks.
- c. Work out the mean mark

40. Construct a regular hexagon of radius 5cm using a ruler, pencil and a pair of compasses only.

41. Plot the points A (-2, 2), B (2, 2), C (-2, -3) and D (2 -3) on a grid b) Join the plotted co-

ordinates and name the figure c) Find the area to the figure (given that 1sq: 1 cm)

42. In a class of 50 pupils, 35 pupils like Rice (R), 24 pupils like posho (P) and some

pupils like both types of food, 3 pupils like neither of the two types of food.

- a) Represent this information on a Venn diagram.
- b) How many pupils like only one type of food?

c) How many pupils like both types of food?

d) If a pupil is picked at random, what is the probability that he/she likes neither of the two types of food?

REVISION PAPER NINE SECTION A

1. The figure below is a triangle. Calculate the size of angle marked x.



2. Given that $3 < y \le 8$, write down all possible values of y that can make the statement true

- 3. Change 1011two to decimal base
- 4. Calculate the square of $2\frac{1}{4}$
- 5. Increase 1800 in the ratio 5:2
- 6. Solve: $Z/_2 4 = 7$
- 7. Using a pair of compasses, a pencil and a ruler only, construct an angle of 135°.

8. Calculate the radius of a circle whose circumference is 132 cm. (use $22/_7$)

9. Given that M = -4 and P = 3, evaluate $MP \div M$

10. Joseph traveled at a speed of 40k.p.h. from 10.00 am to 10.15 am. What distance did he cover?

- 11. Convert 25_{six} to octal base
- 12. Solve: $4^{(x+1)} = 64$
- 13. Solve the equation:2x + 4 = 16
- 14. Given that Set $A = \{a, b, c, d, e\}$ find the number of sub sets in Set A
- 15.What is $^{2}/_{3}$ of 240 mangoes?
- 16.If Ŏ represents 30 tomatoes, how many tomatoes are represented by ŎŎŎŎ?
- 17. What number when divided by either 9 or s leaves no remainder?
- 18. Expand 2,346 using values.
- 19. The average of 3 numbers is 12. Find their total.
- 20.Round off 48.37 to the nearest tenths.
- 21.Remove the brackets and simplify: 6(m + 2) + 3(m + 1)
- 22.Find the GCF of 12 and 18.
- 23. Solve for y in the equation: 3(y + 2) + 2(y 1) = 6
- 24. There are 392 pupils in a school. If $^{2}/_{7}$ of them are boys and the rest are girls,
- how many girls are there?
- 25. Multiply:7.1 by 0.4
- 26. Simplify: $\frac{0.16 \times 2.4}{0.008}$
- 27. given that $P = \frac{3}{4}$ and $r = \frac{2}{3}$. Find 2P r.
- 28.Write 144 in Roman numerals
- 29. Find the square of 0.36
- 30.10% of a number is 120. Find ³/₄ of the same number.

SECTION B

31. Kalema bought 2kg of sugar at shs. 3F each. He also bought a kilo of salt at shs. (F + 200). If he paid shs. 3,700;

a) Find F

b) How much did he pay for the sugar?

32. Three sisters Clara, Dinnah and Faith shared Shs. 48,000 in the ratio 3:4:5 respectively.

a) How much did each get?

b) If Faith gave 1/5 of her money to Clara, how much will Clara have in total?

33. Plot the points A (-2, 2), B (2, 2), C (-2, -3) and D (2 -3) on a grid b) Join the plotted co-ordinates and name the figure c) Find the area to the figure (given that 1sq : 1 cm)34. The diagram below shows a rectangular garden whose measurements are as indicated:



a) Find the value of P

b) What is the area of the rectangle?

35. Below is an isosceles triangle.



Work out:

- a. value of y
- b. size of the angle q in degrees.

36. The cost price of 100kg bag of rice is sh.200,000.

- a. At what price must a trader sell each kilogram in order to a make a profit of 10%.
- b. What was his total profit after selling the bag of rice?

37. In P.6 class of 50 pupils, 30 like Maths (M), 22 like English (E), y like both subjects and 3 do not like any of the two subjects.

- a. Represent the above information on a Venn diagram
- b. Find the value of y
- c. What is the probability that a pupil chose to lead the class likes only one subject?

38. The perimeter of a rectangle is 30cm, if its width is 5cm, calculate its:

- a. Length
- b. Area

39. A Gaso coach is travelling at a speed of 60km/hr left Masaka at 8.00am and reached Mpigi at 11.00am. It then continued to Kampala at a speed of 80km/hr for 2 hrs.

a. Find the total distance from Masaka to Kampala

Calculate the average speed of the coach for the whole journey

40. Zziwa spends $^{2}/_{5}$ of his salary on rent, $\frac{1}{2}$ of the remainder on feeding and he saves

sh. 60,000. How much is his monthly salary?

41. Using a ruler pencil and a pair of compasses only, construct a triangle XYZ in which $XZY = 45^{\circ}$ and YZ = 5.5 cm.

- a) Measure length XY
 - b) Measure length XZ

42. The table below shows marks scored by pupils in a Mathematics test. Use it to answer questions that follow:

Marks scored	50	70	60	80
Number of	2	1	4	3
pupils				

a) How many pupils sat for the test?

b) Find the range mark

c) Calculate the mean mark

REVISION PAPER TEN SECTION A

- 1. Convert 1011_{two} into base ten.
- 2. Divide 5436 by 18.
- 3. Work out: -9 5.
- 4. What is the value of x in; 3x + 2 = x + 6.
- 5. Add 2³/₅ + ¹/₄.
- 6. Find the value of angle marked P.



- 7. Simplify: 2k 6p 4k + 2p
- 8. Namusoke's age is LVII. What is her age in Hindu Arabic numerals.

- 9. Find the square root of $1^{11}/_{25}$.
- 10. Express 45 minutes as a percentage of an hour.
- 11. Using a ruler, pencil and a pair of compasses only, construct an angle of 75°.
- 12. Calculate the circumference of a circle (Take π as 22/7)



- 13. Find the range of the following; 30, -20, 40, 60 and 20.
- 14. A school van travelling at a speed of 45km/hr left Entebbe at 9:30a.m.and reached Kamuli Boys Primary School at 1:00pm. Find the distance between Entebbe and the school.
- 15. A basket has 15 paw paws of which of which 10 paw paws are ripe. If a pawpaw is picked at random, what is the probability of picking a ripe one?
- 16. Judith uses 1kg 250gm of sugar daily. How much sugar does she use in a week?
- 17. Given that set $Y = \{3, 5, 7, 9\}$ and Set $X = \{2, 4, 6\}$. Find set $(X \cap Y)$
- 18. Simplify: <u>0.36x 0.14</u> 0.63
- 19. Write 200,909 in words
- 20. Find the LCM of 9 and 12.
- 21. How many cylindrical tins of radius 3.5 cm and height 10 cm fill the drawn cuboid below?



- 22. The bearing of Mukono from Mbale is 259°. What is the bearing of Mbale from Mukono?
- 23. What is the complement of 84° ?
- 24. A news vendor sold 200 copies of New Vision at shs 1000 each copy. If he was given 10% commission. How much did he get as commission?

- 25. How many lines of symmetry has an equilateral triangle?
- 26. What is the next number in the sequence: 4, 10, 6, 12, 8, 14, 10, 1<u>6.</u>

27. A trader bought a bull at 300,000/= and he sold it at 450,000/=. What was his percentage profit?

- 28. Four cocks cost shs. 100,000. What is the cost of 6 cocks?
- 29. Find the median of the following: 2, 3, 5, 6, 7, 4, 9.
- 30. Find the square root of 9.

SECTION B

- 31. In a class of 55 pupils, 40 pupils eat Fish (F), 15 like both Fish and Meat (M). Given that P pupils like meat only and 5 hate both foods.
- a) Complete the Venn diagram:



b) Find the value of P.

c) If a child is picked at random from this class, what is the probability of getting one who liked meat?

32. David scored the following marks in a series of Prime tests 30, 20, 70, 60, 20, 70 and 20. Study the marks and work out the:-

- (a)Modal mark
- (a) Modal mark
- (b) Median mark
- (c) Mean mark
- 33. (a) Solve for p: 5p + 2 > 3p + 8(b) If x = 1/4, $y = \frac{1}{2}$ and $n = \frac{1}{3}$, Evaluate n - 2x + 4y

34. Lydia had shs. 50,000 and she went to the market and bought the following items in the table shown.

(a) Complete the table

Item	Price	Total cost
3 kg of meat	Shs. 3,500 per kg	Shs
$2\frac{1}{2}$ kg of rice	Shs per kg	Shs. 5000
litre of milk	Shs. 800 per littre	Shs. 4800
3 loaves of bread	Shs. 1500 per loaf	Shs
EXPENDITURE		Shs

(b) If she was given a 5% discount on her bill, how much did she pay?

- (c) How much money was she left with?
- 35. (a) Simplify: $\frac{2}{3} \div \frac{1}{4} \ge 3$.
 - (b) Namusisi used 3/7 of cloth and she was left with 32 metres of the material. What was the total length of the cloth?
- 36. (a) Find the value of a: 3a 2 = 4(finite 5).
 - (b) If today is Wednesday, what day of the week will it be 34 days from today?
- 37. Given y = 2x 3, complete the table below.

Χ	-1	•••••	1/2	•••••	4
у	•••••	-3	••••	1	

38. A bus covered a distance of 216 km between town A and town B in 3 hours.

- (a) What was the speed of the bus in km/hr?
- (b) Express the bus' speed above in metres per second.

39. Bushingye deposited shs. 240,000 in Bank of Africa which offered a simple interest rate of 5% per annum.

- (a) How was her interest after 8 months?
- (b) What was her amount after that period of 8 months?
- **40.** Given that the existing exchange rates are. **US \$ 1 = Ug Shs 1640**

K Shs 1 = Ug Shs 26

Find the total amount of money in Uganda shillings that the trader had if he had US \$ 75 and Kshs 15,000.

41. Peter left town X and drove due Eastwards to town Y a distance of 90 km. He then drove southwards from town Y to town Z a distance of 120 km and he returned by a straight route directly from town Z to town X.

(a) Using a scale of 1cm to represent 10 km draw an accurate diagram showing Peter's route.

(b) Find the shortest distance from town Z to town X in kilometres.

42. Below is a cylindrical tank.



- (a) Calculate its base area (Take π as 22/7)
- (b) Work out the volume of the tank.
- (c) How many litres can it hold when full?
- 43. In the figure, BCD is a straight, line. BX bisects angle ABC and CX bisects angle ACD. Calculate the value of angle BXC in degrees.



44. Use the table below to answer the questions that follow:

Food	Rent	Medical	School fees
20%	25%	40%	X%

(a) Illustrate the above information on a pie chart of radius 4 cm.

(b) Find the value of X in degrees.

45. Study the Venn diagram below, given that n(M) = 40. Use it to answer questions that follow:



If KnM is P

(a) Find the value of P.

(b) Find n(K)

(c) Work out: n(K U M)

46. (a) How many revolutions can a bicycle wheel of radius 35 cm make if it covers a distance of 88 km?

(b) A string 4400 cm long has been wound 50 times a cylindrical tin. Calculate the diameter of the tin.

- 47. (a) Solve: 3(n-2) 4(n-2) = -3.
 - (b) Find the value of P. P + P/5 = 6.
- 48 The interior angle of a regular polygon is twice its exterior angle.
 - (a)Find the size of the exterior angle.
 - (b) How many sides has the regular polygon?
 - (c)Work out the interior angle sum of the regular polygon.
- 49. Water is poured in the tank as shown in the diagram below.



100cm

- (a) Find the fraction of water which is in the tank.
- (b) What fraction of the water is needed to fill the tank?
- (c)Work out how much water is in the tank in litres.

50. (a) Simplify: <u>0.48 x 0.2</u>

0.16

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

51. The sum of the magic square below are the same diagonally, horizontally and vertically. Complete the table.

14		
9	11	
		8

- 52. (a) The mean mark of 4 girls in a science test is 6, the marks of three of them are 4, 7, 5. Find the marks of the fourth girl.
 - (b) Find the range of their marks.
- 53. (a) Given that: -13 < 2x+1 < 11. Find the solution set for x.
 - (b) Find the square root of 0.0081.
 - (c) Round off 499.64 to the nearest whole number.

54. Two taps A and B are connected to a tank. Tap A takes 9 minutes to fill the tank, Tap B takes 12 minutes to fill the tank. Given that the tank holds 7200 litres of water when full;

- a. How much water does tap A pour in the tank after only one minute?
- b. How long does it take for the tank to be completely full if both taps are opened at the same time?

55. Ngobi bought the following items from a market:

3 kg of sugar at shs. 1,500 per kg.

 $2\frac{1}{2}$ kg of rice at shs. 1,400 per kg.

 $1 \frac{1}{2}$ kg of tea leaves at shs. 200 per kg.

200 gms of spices at shs. 3,000 per kg.

- a. How much money did he spend altogether?
- b. If he gave the shopkeeper a ten thousand shilling note, how much money did he get back as change?