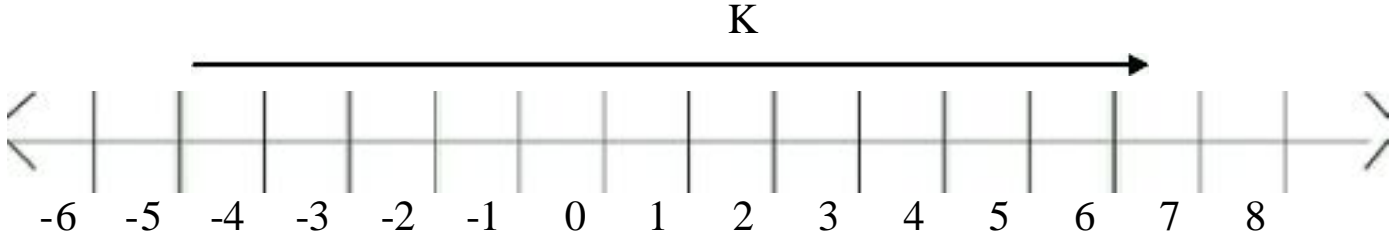


S.2 Mathematics

**REVISION PAPER ONE**

1. Write 'Four hundred and four hundredths' in figures
3. Find the next number in the sequence
  - i. 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  $75^\circ$
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.  


The diagram shows a number line with tick marks from -6 to 8. An arrow labeled 'K' starts at -4 and points to 6.
12. Work out:  $13 \times 4$
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  $30^\circ$ . 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:  $\frac{1}{4} + \frac{3}{5} - \frac{7}{15}$

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:  $\sqrt{3} + \sqrt{8}$

26. Change  $26_{\text{ten}}$  to base four.

27. Find the H.C.F. of 20 and 24.

28. Find the sum of  $\frac{1}{4}$  and  $\frac{1}{2}$ .

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  $5000\text{cm}^3$ ?

### 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.

- a ) Represent the information on a Venn diagram.
- b) Find the value of y.
- c) Find the probability of picking a pupil who likes at least two subjects

32. Given below are posting charges of various items

Letters:

1 unit or less

(20gms).....sh 500

Each additional

Unit.....sh 300

Printed papers:

1unit or less

(50gm).....sh.200

Each additional

unit.....sh.100

Aerogrammes

each.....sh.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
- 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  $135^\circ$  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     | $\frac{1}{2}$ 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 cm    | 140 | 130 | 150 | 160 |
| No. of children | 2   | 3   | 4   | 1   |

- 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<sup>st</sup> to the 30<sup>th</sup> pole?
- b) What distance in km does one cover from the 1<sup>st</sup> to the 30<sup>th</sup> pole?

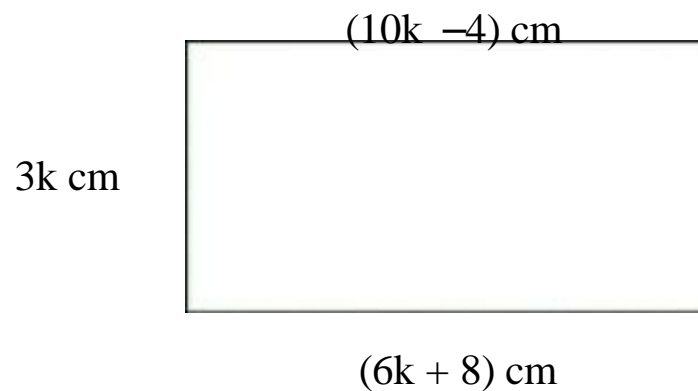
38 Shamus, Najjemba and Falidah shared 72 sweets among themselves in the ratio 3:4:5 respectively.

- a. How many sweets did each child get?

- 39 a. Using a pair of compasses and ruler only construct a triangle KLM with line  $KL = 7\text{cm}$ , angle  $LKM = 45^\circ$  and  $KM = 6\text{cm}$

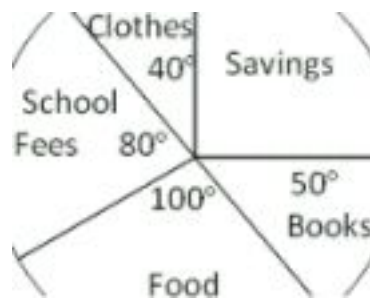
b Measure length LM.

- 40 Study the rectangle below and answer the following questions



- a Find the value of  $k$   
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.

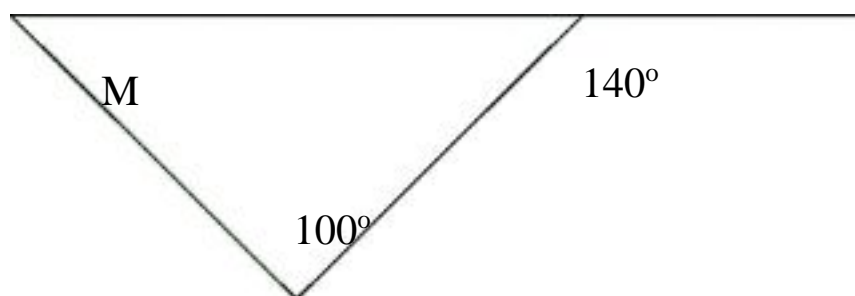


- a How much does he spend on food?  
b How much does he save?  
c What fraction of his salary does he spend on clothes?

- 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?

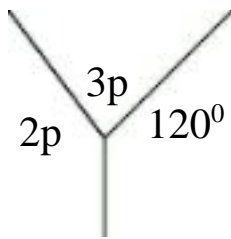
**REVISION PAPER TWO**  
**SECTION A**

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

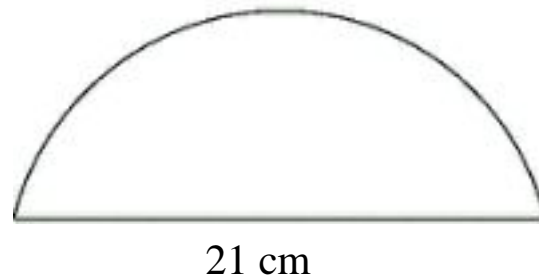


6. The median of 3 consecutive counting numbers is 5. Find the product of the numbers.
7. Jenny received 4,000/= from her daddy. If Lucy received 2,500/= more than Jenny, how much did they get altogether?
8. Work out:  $\frac{x^5 \times x^3}{x^6}$
9. A box contains 36 green and blue pens. If the probability of picking a green pen at random is  $\frac{1}{3}$ . 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:  $141_{\text{five}}$
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  $8\text{cm}$  by  $6\text{cm}$ . Find the length of its diagonal.

20. Solve:  $\frac{3}{4}x = 24$

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:  $x - 2 = 6$

25. Write in Roman numerals: 122.

26. An English lesson which lasted for  $1\frac{1}{2}$  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  $3(x + 1)$

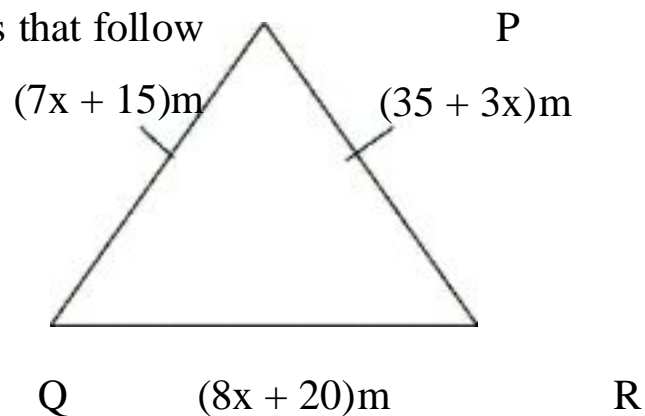
29. Express  $50\text{cm}$  as a percentage of 2 meters.

30. Find the value of  $x$  in the inequality below:

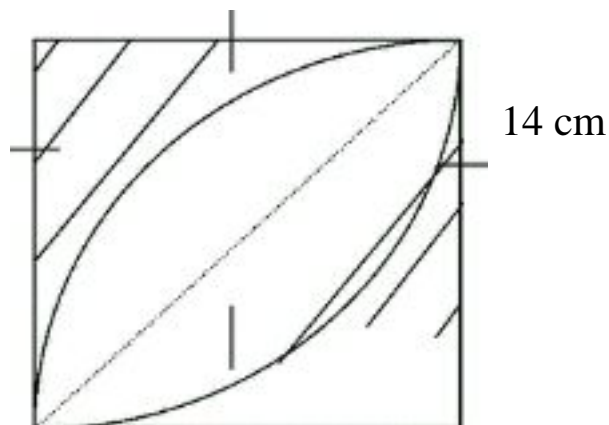
$$3x - 1 > 2.$$

### SECTION B.

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



- 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.