

1. Workout:  $99 \div 3$

2. Simplify:  $\frac{8}{7} \times \frac{8}{11}$

3. Given that  $\epsilon = \{1, 2, 3, 4, 5, 6, 7, 8\}$  and  $A = \{3, 6, 8\}$ . What is  $A'$ ?

4. Write in figures: seven tenths

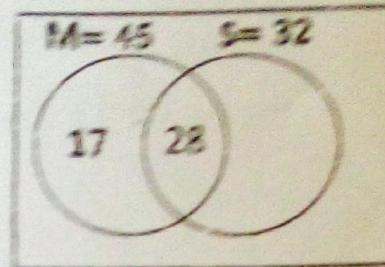
5. Show on the clock face below 10:15 O'clock



6. Expand 45.06 using power of ten.

7. As a favorite subject, pupils in a class chose either Math (M) or Science (S) or both.

$$\epsilon = 49$$



Find the probability of picking a pupil at random who like science only.

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

9. Given a sequence below, find the next two numbers if the sum of the first two digits gives the third number.

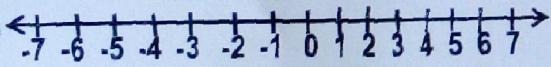
1, 1, 2, 3, 4, 5, \_\_\_\_\_, \_\_\_\_\_

10. Atim sold a short at a profit of sh.1500. If she sold at sh.23000, find the cost price.

11. Robert was the 9<sup>th</sup> boy from either side on the line. How many boys were in the line?

**12.** A cylinder water tank measures 70cm diameter and is 100cm high. Calculate its capacity in litres.

**13.** Work out  ${}^+2 \times {}^-3$  using the number line below.

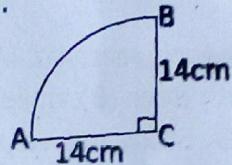


**14.** A doctor monitored the condition of a patient at 12:30pm, express the time in 24hours clock.

**15.** Find the reciprocal of 0.2

**16.** Using a pair of compasses, ruler and pencil only, construct an angle of  $120^\circ$  in the space below.

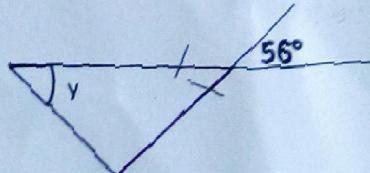
**17.** Work out the perimeter of the figure below.



**18.** Find the solution set for  $n \geq {}^-4$  if  $n$  is a negative integer.

**19.** Find range of the following numbers.  
5, 3, 2, 0,  ${}^-2, 1$ .

**20.** Find the size of the angle marked  $y$  in the diagram below



### SECTION B: (60 Marks)

Answer all questions in this section. Marks for each question are indicated in brackets.

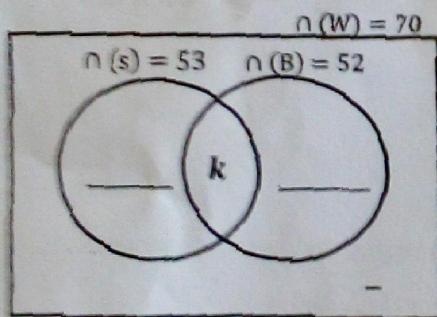
21. (a) Solve for  $w$ :  $301_w = 76_{ten}$  (3marks)

(b) Workout:  $1\ 0\ 0\ 0_{two}$

$$\begin{array}{r} - \\ 1\ 0\ 1_{two} \\ \hline \end{array}$$

(3marks)

22. In a party of 70 guests each received water (W) on arrival, 53 were served with Soda (S), 52 were also served with Beer (B) while K guests were served with all the three drinks and 5 guest took only water. Study the Venn diagram before to answer the questions that follow.



(i) Complete the Venn diagram above.

(2marks)

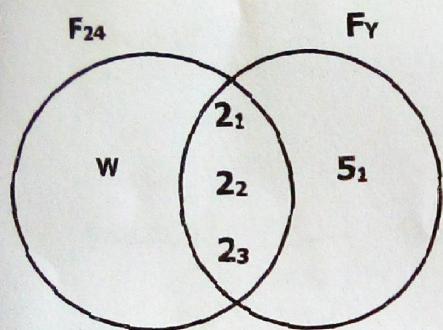
(ii) Find the value of  $k$ .

(2marks)

(iii) How many guests took only two types of drinks?

(2marks)

23. Study the Venn diagram below to answer the questions that follow.



(a) Find the value of  $W$ .

(2marks)

(b) Workout the GCF of 24 and  $Y$ .

(1 mark)

(c) What is the LCM of 24 and  $Y$ .

(2marks)

24. Mr. Opio is standing on the bearing of  $110^{\circ}$  from the borehole which is **60m** away, Ketty is **40m** from Mr. Opio on a bearing of  $080^{\circ}$ .

(i) Using a scale of **1cm=10m**, draw a sketch to show the location of Mr. Open, borehole and Ketty. (1mark)

(3marks)

(ii) Draw an accurate diagram for the three locations.

(1mark)

(iii) What is the shortest distance from borehole to Ketty?

25. a) What distance does a car cover at 15m/sec for 30 seconds? (2marks)

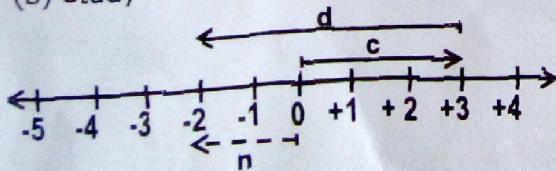
(b) Convert 15m/sec to km/hr. (3marks)

26. (a) Add: 33245 to 793145. (2marks)

(b) Simplify:  $5^2 \times 5^3 \div 5^4$ . (2marks)

27. (a) The temperature at the peak of Mt. Rwenzori is  $-8^{\circ}\text{C}$  and at its foot is  $27^{\circ}\text{C}$ , find the temperate range. (2marks)

(b) Study the number line and answer the questions that follow.



(i) Write the integers represented by;

(3marks)

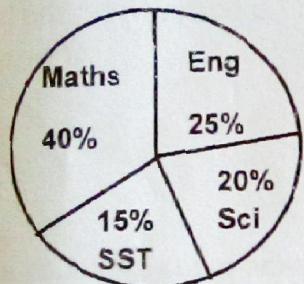
c = \_\_\_\_\_

d = \_\_\_\_\_

n = \_\_\_\_\_

(ii) Write a Mathematical Statement for the above.

28. The pie chart below shows 240 pupils who passed 4 papers.



(a) How many pupils passed English? (2marks)

(b) What fraction of the total passed Science? (1mark)

(c) How many more pupils passed Maths than SST? (2mark)

29. The table below shows the exchange rates in the Forex Bureau. Use it to answer the questions that follow.

Currency	Buying	Selling
1US	Ugsh. 3200	Ugsh. 3300
1Ksh	Ugsh. 28	Ugs 30

a) Michelle has 5000 Kenya shillings and 200 dollars, how much is this altogether in Uganda Shillings? (3marks)

b) Mr. Oryem left Kenya for USA with 66,000 Kenya shillings. How many dollars did he got? (2marks)

30. Jovan borrowed a sum of money from housing finance bank that charged him 4% interest for

2 years. If he paid an amount of 108000 shillings, how much did he borrow from the bank? (4marks)

31. Class champion test consisted of 30 short questions which was marked in such a way that a teacher awarded 3 marks for every correct answer and deducted half a mark for every wrong answer.

(a) How many marks did the pupil get if he answered 12 questions correctly? (2marks)

(b) How many correct responses would a pupil who obtained 62 marks make? (3marks)

32. (a) Mr. Orac plan to spray his tomato garden using a spray pump of full capacity 16 litres. If the pump nozzle releases  $160\text{cm}^3$  of pesticides per minutes, how long will it take to empty the pump in one round. (3marks)

(b) If the work starts at 9:20am, at what time will he finish the work? (2marks)

END

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