THE VERIFIED UNEB BLUE PRINT ITEM (FOUR)

MATHEMATICS

SECTION A (40 MARKS)

1. Workout **6** tens + **2** ones

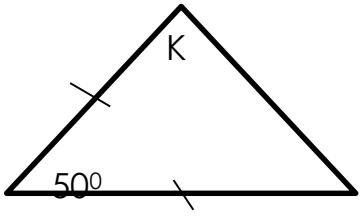
2. Express **25**% as a ratio.

1/

3. Write **"Forty-three thousand forty-three"** in figures.

4. Find the next two numbers in the sequence. **1, 6, 4, 9, 7,** _____, _____

5. Find the value of **K**.



6. Add $\mathbf{1011}_{two}$ + $\mathbf{101}_{two}$

7. Solve **3**y – **5** ≤ **13**

8. A meeting that lasted for **1** $\frac{1}{2}$hrs ended At **9:30**a.m. At what time did it start?

9. Workout: $\frac{3}{4} \div \frac{1}{2}$

10. The dozen of pens is Shs**6000**. What is the cost of **8** similar pens?

11. Write **CXLIV** in Hindu Arabic numerals.

12. Cheplimo ran **5,000**m in **25**min. What

13. Workout (**4.5**x**145**) – (**45**x**4.5**) using

was his average speed?

distributive property.

14. By selling a bag at Shs**45,000**, a trader made a loss of Shs**15,000**. Calculate his percentage profit.

15. Subtract $-\mathbf{2} - X$ from $\mathbf{3}x - \mathbf{1}$

16. Mary is the **9th** girl from either side of the line. How many girls were standing in the line?

17. Find the area of a circle whose circumference is **88**cm.

18. Set **K** has **31** proper subsets. How elements are in set **K**?

20. Without dividing, show that **6957** is divisible by **9**.

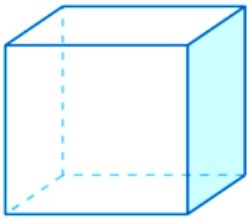
19. A box contains **5** red pens, **6** black pens and **8** blue pens. If a pen is picked at random what is the probability of picking a red pen?

SECTION B (60mks)

21.a). Simplify **5.4** x **0.8** (3mks)

b). How much more money did Jacob get than Job? (2mks)

23. The cuboid below has a volume of 5^3 cm



b).Calculate its total surface area.(3mks)

24. Amos went to the Super market and bought the following items.
4kg of meat at Shs**15,000** per kg.
$\mathbf{2^1/_2}$kg of rice at Shs**4,000** per kg.
4 sachets of curry powder at Shs**4,000**
20 tomatoes at Shs**2,000** for every five tomatoes.

a). If he received a discount of **10**%, how much did he pay for all the items.(4mks)

0.09 x **1.2**

480cm

6cm

8cm

a). Find the height in cm. (2mks)

b).Simplify; $\frac{1}{2} + \frac{2}{3} \div \frac{4}{9}$. (2mks)

22a). Job, Joab and Jacob shared a certain amount of money in the ratio of **2**:**3**:**5**. If Joab got Shs**24,000**. How much did they share? (3mks)

26. The table below shows how a motorcyclist travelled from town **F** to town **M** through towns **A** and **B**. Study

and use it to answer questions that follow.

***Towns* Departure**

Town ***F***	Departure – 9:00am
Town ***A***	Arrival - 10:45am Departure – 11:00am
Town ***B***	Arrival - 12:50pm Departure - 1:05pm
Town ***M***	Arrival - 2:30pm

a) At what time did the motorcyclist leave town **A**? (1mk)

b). How long does the motorcyclist take to travel from town **F** to town **M**? (3mks)

b). Given that she was given a change of Shs**1,200**. How much money did she have at the beginning? (1mk)

25.)The base area of a cylindrical tank is **2200**cm² If the tank has a height of **100**cm. Calculate its capacity in litres when it is
completely full of water? (5mks)

c). Find the total stoppage time of the motorcyclist. (1mk)

27). At Peter's birthday, **16** guests took water(**W**) (**x** + **20**) guests took Sodas (**S**) only. **10** guests took both water and while (**x** – **3**) guests took neither of the two drinks.
a). Complete the venn diagram below

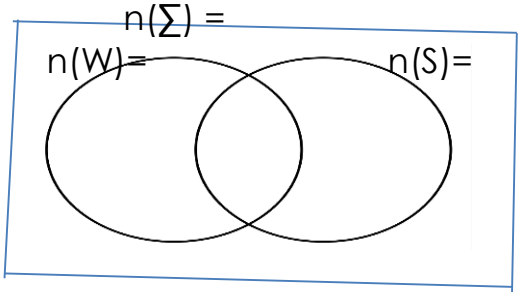
28a). The total surface area of a cube is **54**cm^2. Calculate the length of each side
Soda (3mks)

b). Find the value of **x** if **38** guests took

soda. (2mks)

29a). The mean of **9**, **7**, (**2**x + **5**) and **10** is **8**.
Find the value of **x**. (3mks)

(1mk)

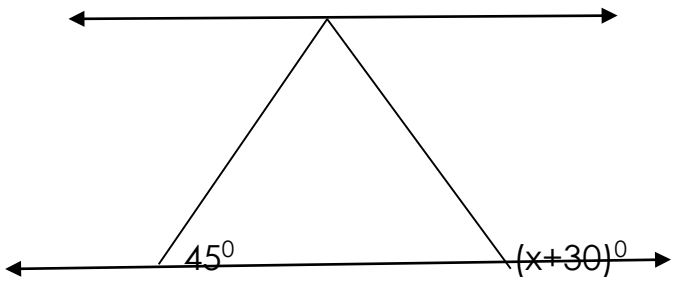


b). Workout its volume. (2mks)

d). If one person is picked at random b). Find their median. (2mks) from the guests. What is

the probability
that he or she took water only? (2mks)

30. In the figure below, **PQ** is parallel to



a). Find the value of **P**. (2mks)

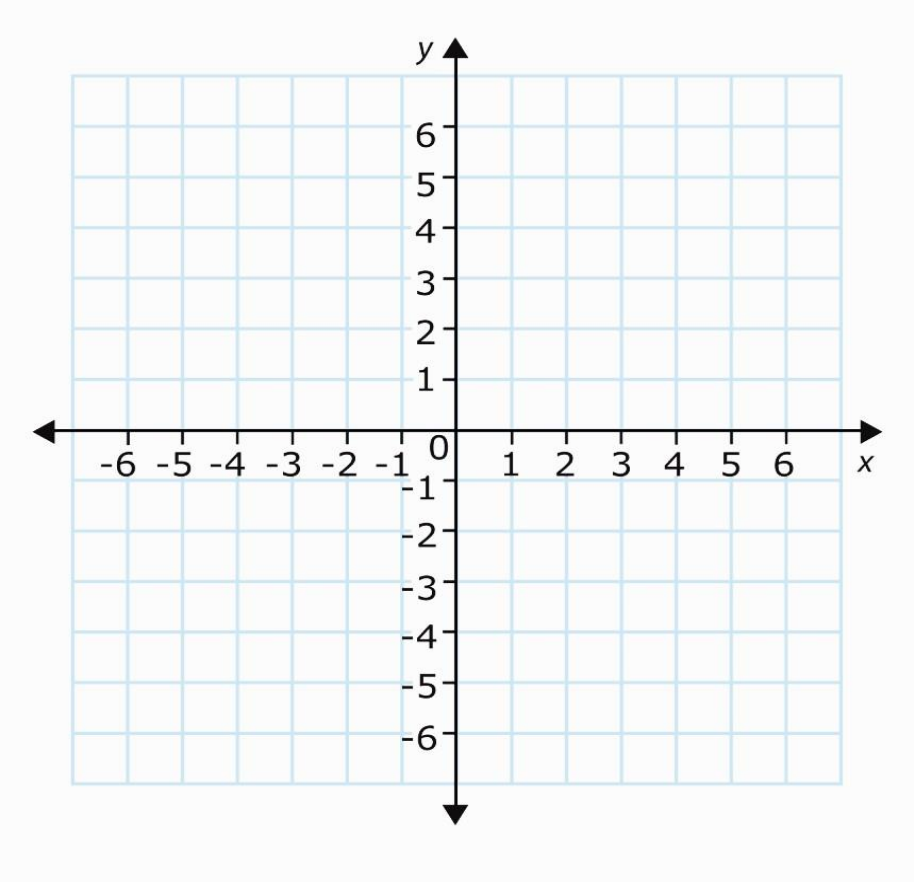
b). Find the value of **X**. (3mks)

31. A car uses $^1/_3$ of a litre to travel **5**km. If

RS. a litre of petrol costs Shs**6500**, how much
70^0 money is needed to buy enough petrol to P
cover a journey of **300**km? (5mks).

32a). On the coordinate graph below, plot the following points.

A(**0**,**3**), **B**(**3**,**1**), **C**(**0**,**-5**), **D**(**-3**,**1**) (3mks)



b). Join the points **A** to **B**, **B** to **C**, **C** to **D** and **D** to **A** and name the figure formed. (2mks)