PERFECT EDUCATION SERVICES - KAMPALA

PRIMARY SEVEN SPECIAL PLE EXAMINATION

2024

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.

EMIS No.						Personal No.		

Candidate's Name .....

Candidate's Signature .....

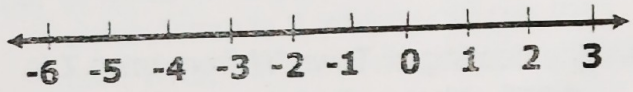
EMIS Number .....

District Name .....

SECTION: A

1. Work out: **1000 – 24.**

2. Workout $^{-}3 - {}^{-}5$ using the number line below.



3. Express **10m/sec** into **km.hr**

4. With a help of **ruler**, **pencil** and a pair of **compasses** construct an angle of **105**^{0}.

5. Express **0.2333** .....as a common fraction.

6. Write a quarter of **ten o'clock** in the morning in figures.

7. Given that $x = 4$ and $y = 6$, find the value of $x(x - y)^2$.

8. Find the number whose scientific notation is 7.031×10^{-3}.

9. Draw a venn diagram to show the relationship $K \cap L = K$

10. Amos bought a dozen of pens at **sh. 6000**. He later sold each pen for **sh. 800**. Calculate the profit Amos made.

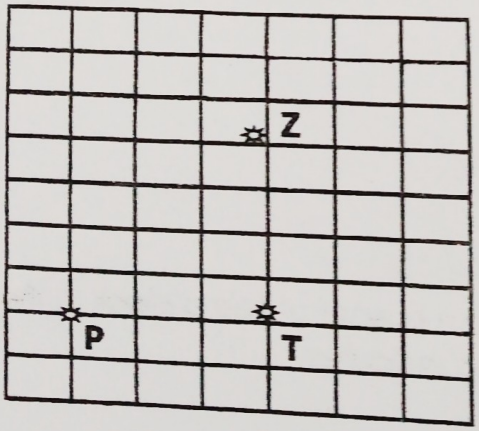
11. The perimeter of a square if $3.6m^2$, workout its area.

12. Roundoff **9948** to the nearest hundreds.

13. The bearing of Town **W** from town **Z** is 105^0. What is the bearing of town **Z** from town **W**?

14. Aminah has **sh. 1000** notes numbered from **AQ502830** to **AQ502839**. How much does she have

The figure shows a square unit grid.

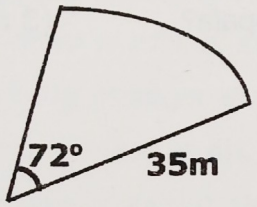


15. How many units is the shortest distance from **P** to **Z**?

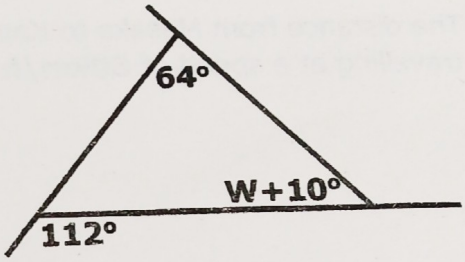
16. In a class of **40** pupils, $^{3}/_{8}$ of them are girls. If $^{1}/_{5}$ of the boys are absent, how many boys are present?

17. The figure shows a map of a field.

Calculate the distance around the field.



18. Workout the value of **w**.



19. From a supermarket, Maria bought $\mathbf{33}_{\text{five}}$ books and John bought $\mathbf{25}_{\text{six}}$ books. How many more books did Maria buy than John?

20. If Ochan is **w years** today, and his sister Achan is **2 years** younger than him. What will the sum of their age be in **7 years'** time?

SECTION B

21a. Solve for **m**: $\frac{2}{7}(7m + 14n) + \frac{2}{9}(18m - 36n)$ **(3 marks)**

b) Amebe is three times as old as his sister Rose. The product of their age is **48** years. How old is Rose. **(3 marks)**

22a. The distance from Masaka to Kampala is **120 km**. A bus left Masaka at **11:45a.m** travelling at a speed of **60km/hr**. when did the bus reach Kampala? **(3 marks)**

b) A lorry took 6 hours travelling from Kampala to Mbale at an average speed of **40km/hr**. how much longer will the lorry take if it travels back at an average speed of **30kmih**?

(3 marks)

23a. Solve for **n**: **2n – 1 = 4** (Finite 5)

(2 marks)

b) Today is Tuesday 15th August 2024, what day of the week will it be on the 18th October 2024 **(3 marks)**

24. Okia bought the following items

2 loaves of bread at **sh. 7500** each loaf

3 litres of milk at **sh. 1500** per litre

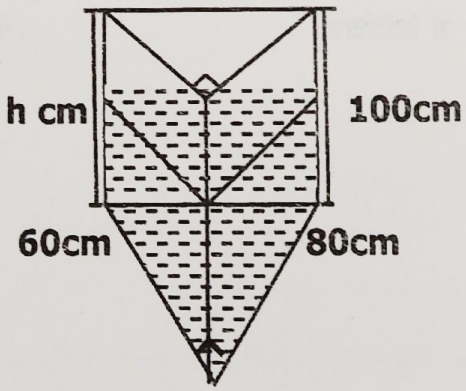
1 ½ kg of sugar at **sh. 2400** each kg

4 kg of meat at **sh. 9500** each kg

500gm of salt at **sh. 600** per kg.

If Okia had a **fifty thousand shillings note**, how much debt will Okia have to pay later? **(6 marks)**

25. The triangular water tank below is $\frac{1}{3}$ full of water. Use it to answer the questions that follow.



a) How many litres of water are in the tank? **(2 marks)**

b) Workout the height of the tank when full of water. **(3 marks)**

26a. Simplify: **0.75 - 0.045 + 0.55** **(2 marks)**

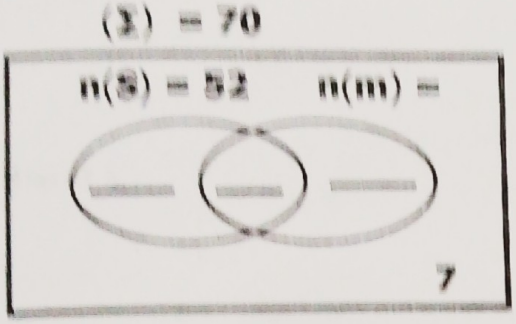
b. Tap **A** take **6 minutes** to fill a tank of water. And tap **B** takes **k minutes** to draw water out of the tank. If both taps takes **24 minutes** to fill the tank, how long does **tap B** take to empty the tank? **(3 marks)**

27. Study the magic square below and find the value of letters. **(4 marks)**

8	3	x
t	5	9
y	n	2

28. At a birthday party, **70** guests were invited, **52** were served with sodas (**S**), **y** were served with mineral water (**m**), **y** while **7** did not take any of the two drinks and **13** were served with both drinks.

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



b) Find the value of **y**. **(2 marks)**

29a. Use the distributive property to workout **(125 x 3.5) – (25 x 3.5)** **(2 marks)**

(2 marks)

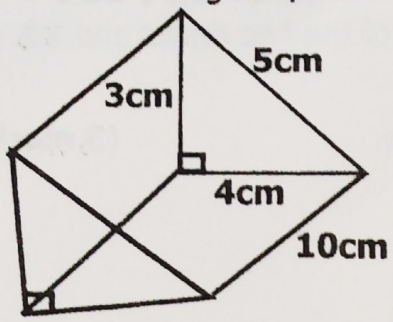
b) Simplify: $\frac{36p^3a^2}{9a^2p}$

(5 marks)

30. Given that **y = 2x + 1**, complete the table below.

x	0	___	4	___	7
y	___	5	___	11	___

31. Use the triangular prism below to answer the questions that follow.



a) Find the sum of the length of all its edges. **(3 marks)**

b) Find the volume of the triangular prism. **(2 marks)**

32. Using a pencil, ruler and a pair of compasses only, construct rhombus **PQRS** such that **PQ = 6cm** and diagonal **PR = 10cm**. **(4 marks)**

b) Measure the size of angle **PQR**. S **(1 mark)**