CALIDALITY CHRISTIAN SCHOOL,

SSEDDE JUNIOR ACADEMY AND BWEYALE PREPARATORY SCHOOL

P.7 JOINT PLE MOCK 2025

MATHEMATICS

Time allowed: 2hrs 30minutes

Emis No.						Personal No.		

Candidate's Name:.....

Candidate's Signature:.....

District Name:.....

<u>Read the following instructions carefully</u>:

1. Do not forget to write your **name** and **district name** on this paper.

2. This paper has two sections: **A** and **B**. Section **A** has **20** questions and Section **B** has **12** questions. The paper has **16 printed pages** altogether.

3. Answer **all** questions. All the working for both sections **A** and **B** must be shown in the spaces provided.

4. All working must be done using a **blue** or **black** ball point pen or ink. Anywork done in pencil will not be marked.

5. Unnecessary **changes** in your work and handwriting that cannot easily be read may lead to loss of marks.

6. Do not fill anything in the table indicated; **For Examiner's Use Only.**

FOR EXAMINERS' USE ONLY		
Qn No.	**MARKS**	**EXR'S No.**
1 – 5		
6 – 10		
11 – 15		
16 – 20		
21 – 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
TOTAL		

SECTION A : 40 Marks

Answer **all** questions in this section

Questions **1** to **20** carry two marks each

1. Find the quotient of **1414** and **7**.

2. Write **Forty-two thousand forty** in figures

3. Given that **K** = {1, 2, 3, 4, 5} and **M** = {2, 4, 6, 8}. Find the difference between the n(KuM) and n(KnM).

4. Workout the cube root of **64**?

5. How many ¼ kg of sugar are in 2kg of sugar?

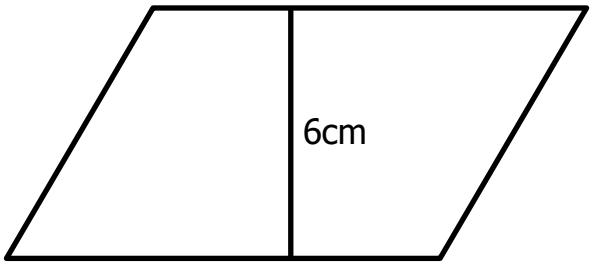
6. The room temperature was 26^0C in the morning, it rose by 2^0C in the afternoon. What was the temperature of the room in the afternoon?

7. Given that  stands for 4 balls. Draw pictures to represent 20 balls.

8. The first program at UBC station always starts at 00 05 hours. Express this time in 12 hour clock system.

9. The school bursar withdrew five thousand shilling notes from Central Bank consecutively labeled from DJ2751854 to DJ2751873. How much money did she withdraw altogether?

10. Calculate the area of the figure below.

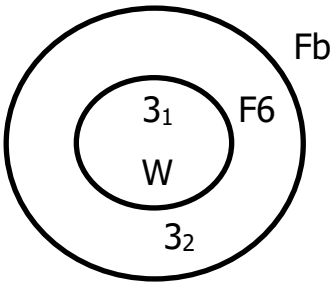


11. Simplify: 5m – 2(3 – m)

12. The average height of some girls was 132cm and their total height was 792cm. How many girls were they?

13. Express $^{3}/_{5}$% as a decimal.

14. The diagram below shows set **Fb** and set **F6**. Study it carefully and answer the questions that follow.



Find the GCF of b and 6.

15. Correct 45.789 to one decimal place.

16. Using distributive property and workout: (0.4×10) + (1.6×10)

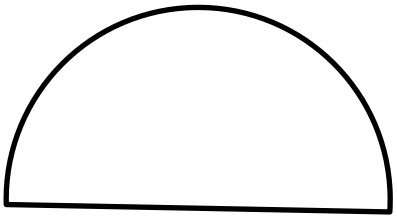
17. Using a protractor, a ruler and a pencil, draw an angle of 75^0.

18. Simplify: $\frac{2^3 \times 2^0 \times 2^4}{2^5}$

19. Circle only all the leap years among the years listed below.

2022, 2024, 2026, 2030, 2032

20. Find the area of the sector below.

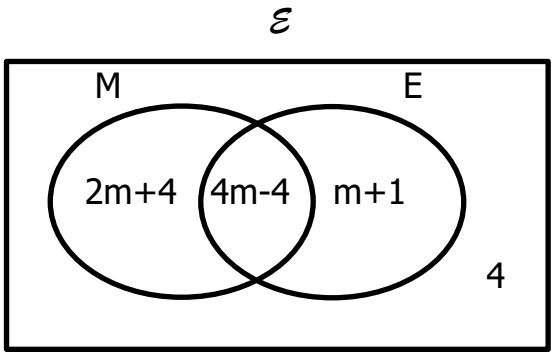


SECTION B : 60 Marks

Answer **all** questions in this section

Marks for each question are indicated in brackets

21. The Venn diagram below shows number of pupils in a class who like Mathematics (**M**) and those who like English (**E**).
Study it carefully and use it to answer the questions that follow.



(a) If the number of pupils who like Mathematics is five times the number of pupils who like English only. Find the value of m. (3 Marks)

(b) How many pupils like only one subject? (2 Marks)

22. (a) Solve for $4^{-2} + y^0$ (2 Marks)

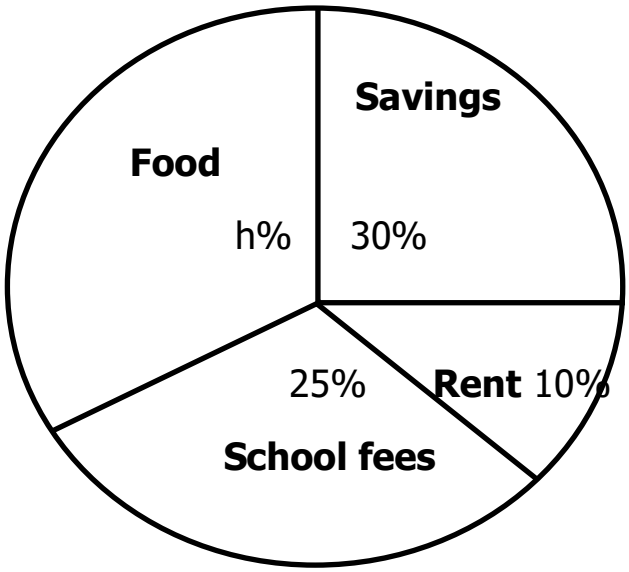
(b) A mountain climber climbs 3km high of a sloppy mountain daily. At night, he slopes down 1km as he is a sleep due to slippery slope. The mountain in 10km high. Find how many days will it take him to reach the peak of the mountain.

(4 Marks)

23. (a) Tap **P** takes 6 minutes to fill a container of water. Tap **G** takes y minutes to empty the whole container full of water. Find the value of y if it takes 18 minutes for the tank to get full of water if both taps are left open. (3 Marks)

(b) Decrease 400 by 20% then 10%. (2 Marks)

24. The pie chart below shows how Miss Emily spends her salary. She spends sh. 30,000 more on food than on school fees. Find how much she saves? (5 Marks)



25. The ratio of two numbers is **3:5** respectively, their GCF is **6** and their LCM is **180**.

(a) Find the numbers. (3 Marks)

(b) Find the product of the numbers. (2 Marks)

26. Using a pair of compasses, ruler and a pencil only, construct a rhombus FGHJ, FG=6cm and angle LFG = 45^0. (5 Marks)

27. Study and complete the table below. (5 Marks)

Item	**Quantity**	**Unit cost**	**Amount**
Sugar	2kg	Sh. …… per kg	Sh. 7200
Rice	……kg	Sh. 4800 per kg	Sh. 3600
Milk	250 ml	Sh. 2000 per litre	Sh. ……
Biscuits	3 packets	Sh. …… per packet	Sh. ……
Total expenditure			Sh. 13,700

28. During the preparation for a study tour in a certain school, a primary two pupil paid Sh. 4000 more than a primary one pupil. A primary three pupil paid half the sum of the money paid by the primary one pupil and the primary two pupil.

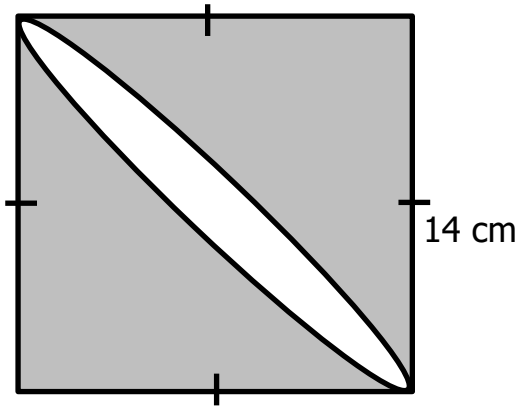
    A parent who had twins in P.1, a P.2 child and a P.3 child paid Sh. 42000 for all his children.

    (a) How much did he pay for each of the twins? (4 Marks)

(b) How much more did he pay for the P.3 child than the P.1 child. (2 Marks)

29. In the figure below, ABCD is a square, ACB is a quadrant and ACD is also a quadrant.

Workout the area of the part of the unshaded part of the square. (5 Marks)



30. The bearing of Town A from Town C is 0150 at a distance of 60km. The bearing of Town A from Town B is 3000 at a distance of 54km.

(a) Using a scale of 1cm to represent 10km, draw a sketch to show the towns. (2 Marks)

(b) Draw an accurate diagram to show the location of the three towns. (3 Marks)

31. A truck driver travelling from Town G to Town P started his journey at 6:20 a.m. travelling at a steady speed of 40km/h. At exactly 7:35 a.m., he got a puncture that took him 20 minutes to fix it. He continued with his journey now travelling at an average speed of 75km/h until he arrived at Town P by 10:02 a.m.
Find the distance between Town G and Town P. (5 Marks)

32. (a) A contractor was given 4 years 5 months to complete the hotel building. He decided to get assistance from sub-contractors who enabled him to finish the building nine months earlier. Calculate after how long was the building was accomplished.

(3 Marks)

(b) Express 108km/h as metre per second. (2 Marks)