PRE-PLE EXAMINATION, 2024
MATHEMATICS (SET 5)
Time allowed: 2 hours 30 minutes

Random No.						Personal No.		

Candidate's Name: .....

Candidate's Signature: .....

Date: .....

Read the following instructions carefully:

1. Do not write your **school** or **district name** anywhere on this paper.
2. This paper has **two** Sections: **A** and **B**. Section **A**, has **20** questions and Section **B** has **12** questions.
3. Answer **all** the questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** the working **must** be done using a **blue** ball point pen or ink. Any work done in pencil other than graphs and diagrams will **not** be marked.
5. **No calculators** are allowed in the examination room.
6. Unnecessary **changes** in your work and handwriting that cannot be read easily may lead to **loss of marks**.
7. Do not fill or write anything in the table indicated: **"FOR EXAMINERS' USE ONLY"** and boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn. No.	Marks	Examiner's No
1 – 10		
11- 20		
21 – 30		
31 – 40		
41 – 43		
44 – 46		
47 – 49		
50 – 52		
53 – 55		
TOTAL		

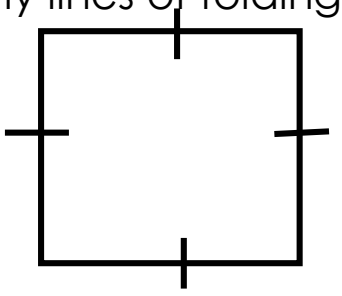
SECTION A: 40 MARKS

1. Workout: 12 + 17

2. Simplify: 2y + y + 3y

3. Express $\mathbf{1101_{two}}$ to a decimal base.

4. How many lines of folding symmetry has the figure below?



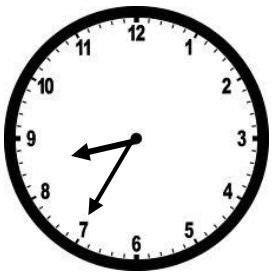
5. Given that set Q has **8subsets**, calculate the number of elements in set Q.

6. Workout the square root of **0.36.**

7. What integer is **five** steps to the right of **$^{-}$3?**

8. The **mean** of 9, 8, 6, 4 and x is **6**. Workout the value of **x.**

9. What **morning** time is shown on the clock face below?



10. Use **distributive property** to workout: **(8.5×6) + (8.5×14).**

11. Find the next number in the sequence;

2, 3, 5, 7, _____

12. Using a ruler, pencil and a pair of compasses only, **construct** an angle of $\mathbf{60^0}$ in the space below.

13. If 62 poles were fixed along a straight road. The poles are a fixed **5m apart**. Workout the length of the road.

14. What number has been expanded to give

$(9\times10^{2}) + (7\times10^{0}) + (8\times10^{-1})$?

15. **Sh.60,000** can buy only **5 books**. How many similar books would Amos buy with **sh.108,000?**

16. Workout the **smallest** number of oranges that when divided amongst **either 8 boys** or **6 girls** leaves **5 oranges** as a remainder.

17. Workout: 8 + 8 ÷ 8

18. Nozu deposited **sh.72,000** in a bank that gives interest rate of **10%** per year a period **of $1\frac{1}{2}$ years**, **calculate** the interest Nozu will get in his account.

19. Adongo was facing **northeast** and tuned clockwise **135^0.** Which direction is she facing now?

20. Round of **39.96** to the nearest **tenths.**

SECTION B: 60 MARKS

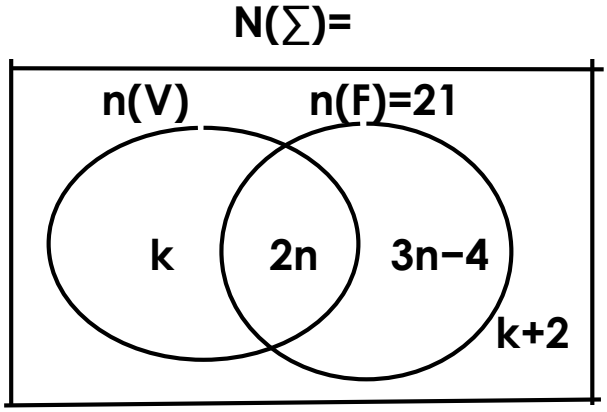
21. Some children in primary six scored the following marks in a test: **42, 35, 28, 40, 35,** and **60**

(a) Workout the **median** mark (02 marks)

(b) Calculate **the mean** score (02 marks)

(c)Find the **modal frequency** (01 mark)

22. The **Venn diagram** below represents a school team that went out for competition in football **(F)**, and Volleyball **(V).** Study it and answer questions that follow;



(a) Work out the value of **n.** (02 marks)

(b) If **14 players** did not play football **(F),** workout the value of **k.**
(02 marks)

(c)How many players went for the competitions**?** (02 marks)

23. An **assembly** that lasted **45 minutes** ended at **9: 10am.When** did did it start? (02 marks)

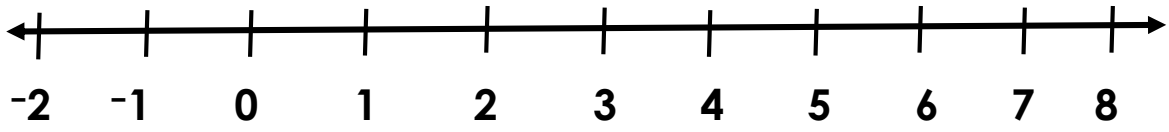
,

(b)Express 0720hours in **12 hour** clock system. (01 mark)

(c)A taxi moving at a steady speed of **120km per hour** travelled for only **20 minutes**, what distance did the taxi cover?

(02 marks)

24.(a)Show **4 × 2** on a number line below; (02 marks)



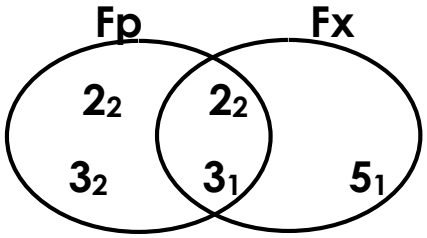
(b) Find the **solution set** for inequality; **20 ≥ 3p + 5 ≥ 11.**

(03 marks)

25. (a)Express **94 i**n Roman numerals (2 marks)

(b)Workout the product of the value of **2** and the place value of **7** in the number **8529.736** (03 marks)

26. Study the Venn diagram below and answer the questions.



(a)Find the value of p. (02 marks)

(b)Workout the **GCF** of **Fp** and **Fx.** (01mark)

(c) Calculate the **LCM** of **Fp** and **F x**. (02 marks)

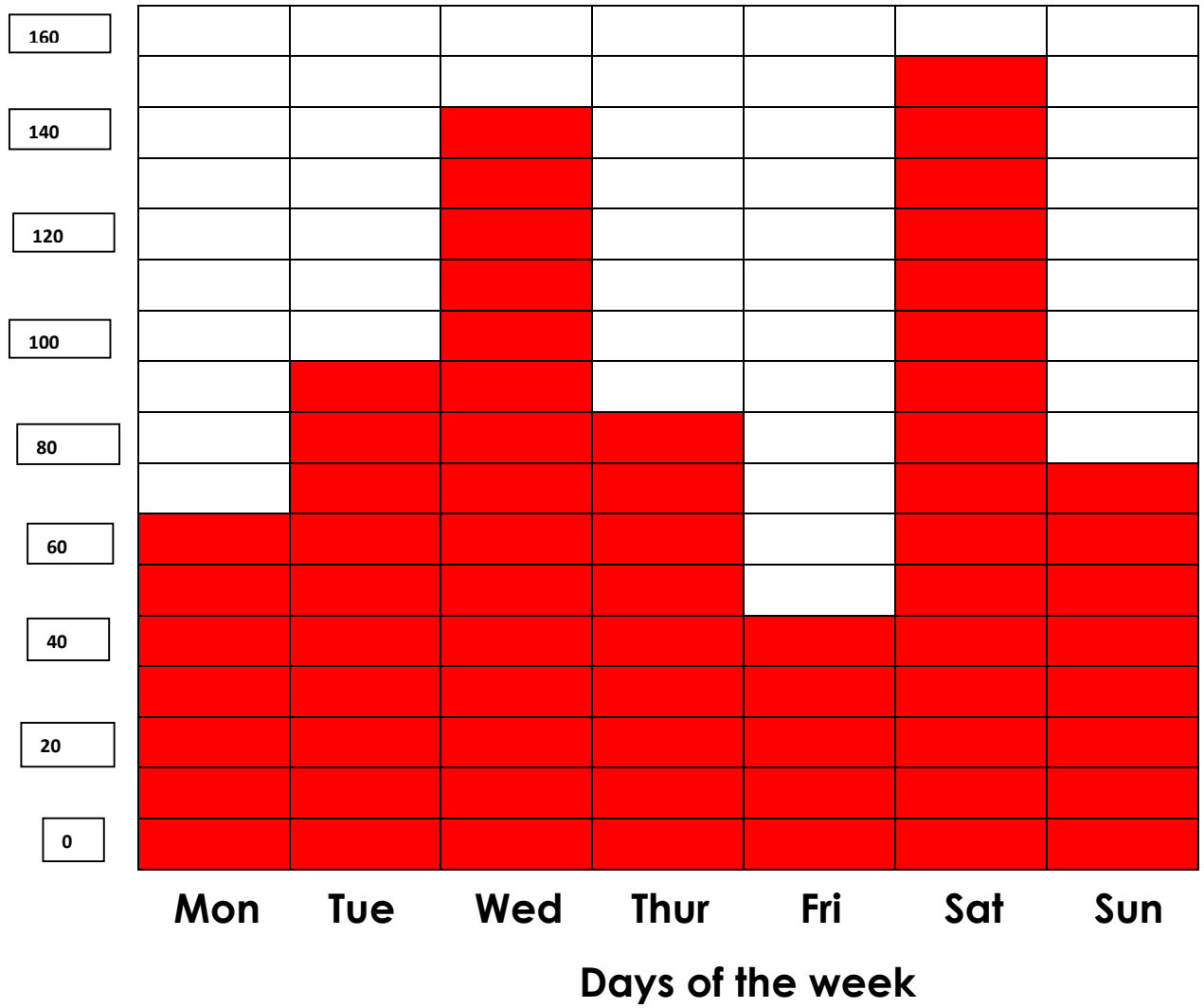
27. Using a ruler, pencil and a pair of compasses only, construct a triangle **ABC** where **AB = 6cm**, angle **ABC = 45^0, line BC = 7cm.**

(04 marks)

(b) Measure angle BAC _____ (01 mark)

(c)Measure length AC _____ (01mark)

28. The graph below shows the number of eggs collected from Kaka's poultry farm in a week. Study it carefully and answer questions that follow.



(a)How many eggs were collected on **Thursday**? (01 mark)

(b) Which day had the **highest fall** in the number of eggs? (01 mark)

(c) **Workout** the average number of eggs collected in the last four days. (03 marks)

29. The **median** of five consecutive **odd** numbers **is 27**. If the first number **is k**, workout the value of **k**. (02 marks)

(b) The temperature at night fell **from 5^0c to $^-25^0c$** . **Calculate** the **temperature fall.** (02 marks)

30. Jesca, **Jacinta** and **Joan s**hared some books in such a way that Jesca got **9 books**, Jacinta got **6 books** and Joan go **40%** of the total books shared.

(a)What percentage of books did **Jacinta** get? (03 marks)

(b) How many books did they share **altogether**? (03 marks)

31. A tank **is** $\frac{4}{5}$ **full** of water, when **500 litres** of water is drawn it **becomes** $\frac{2}{3}$ **full** of water. Calculate the capacity of the tank when full of water. (04 marks)

32. A motorist travelled from town **P** to **Q** at a speed of **70km** per hour. On the return journey, the motorist travelled at a speed of **50km per hour**. The total time taken for the whole journey is **6 hours.**

(a)Find the distance from **town P to Q.** (03 marks)

(b)Calculate the time taken on the **return** journey. (02 marks)

END