

# THE MILESTONE EXAMINATIONS 2024

#### **PRIMARY SEVEN SET II**

### **MATHEMATICS**

#### Time allowed: 2 hour 30 minutes

|                   | EMIS No.               |      |       |   |       | Personal No. |       |       |       |  |
|-------------------|------------------------|------|-------|---|-------|--------------|-------|-------|-------|--|
| Index No.         |                        |      |       |   |       |              |       |       |       |  |
| Candidate's Name: |                        |      |       |   |       |              |       |       |       |  |
| Candidate's S     | Candidate's Signature: |      |       |   |       |              |       |       |       |  |
| School Rando      | m Num                  | ber: | ••••• | • | ••••• | •••••        | ••••• | ••••• | ••••• |  |

#### Read the following instructions carefully;

- 1. This paper has two sections: A and B
- 2. Section A has 20 questions (40 marks)
- 3. Section **B** has **12** questions **(60 marks)**
- 4. Answer all questions. All the working for both sections **A** and **B** must be shown in the spaces provided.
- 5. All working must be done using a blue or blackball point pen or ink. Any work done in pencil will **NOT** be marked.
- 6. Unnecessary changes in your work and handwriting that cannot be easily read may lead to loss of marks.
- 7. Do not fill anything in the table indicated **"For Examiners' use only"** and the boxes inside the question paper.

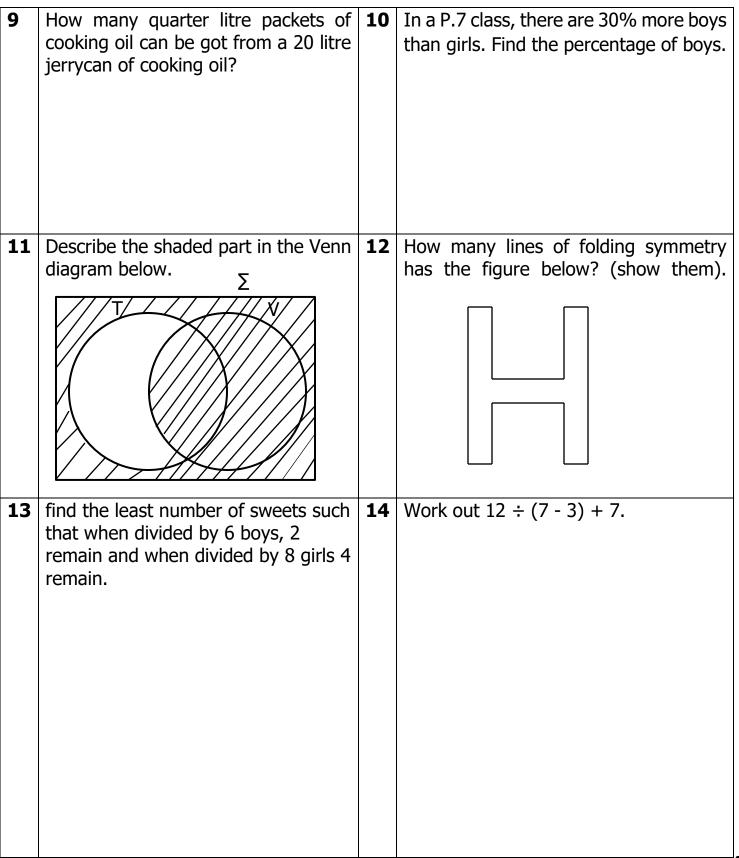
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| FOR EXAMINERS' |       |           |  |  |  |
|----------------|-------|-----------|--|--|--|
| USE ONLY       |       |           |  |  |  |
| Qn. No.        | Marks | EXR's No. |  |  |  |
| 1-5            |       |           |  |  |  |
| 6-10           |       |           |  |  |  |
| 11-15          |       |           |  |  |  |
| 16-20          |       |           |  |  |  |
| 21-22          |       |           |  |  |  |
| 23-24          |       |           |  |  |  |
| 25-26          |       |           |  |  |  |
| 27-29          |       |           |  |  |  |
| 30-32          |       |           |  |  |  |
| TOTAL          |       |           |  |  |  |

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|   | SECTION A (40 MARKS)   |   |   |  |  |  |
|---|--|---|---|--|--|--|
| 1 | Multiply 3 x 5 using repeated addition.                                    | 2 | Write CXCIV in words                                    |  |  |  |
| 3 | Given that set Q has 31 proper subsets. How many elements does set Q have? | 4 | Find the next number in the sequence: 7, 11, 20, 36, 61 |  |  |  |
| 5 | Simply 5p – r + P + 7r.  | 6 | Find the value of P in the figure below.  2p   1200     |  |  |  |
| 7 | Express 72km/h as m/s  | 8 | Round off 59.98 to one decimal place                    |  |  |  |



| 15 | Calculate the perimeter of the figure below. (Use $\pi$ as $\frac{22}{7}$ ) $21m$ |    | If 4 men take nine days to complete a job. How long will 12 men take to finish the job at the same rate?   |
|----|---|----|--|
| 17 | Simplify <sup>9</sup> - <sup>6</sup> .  | 18 | The average mass of 3 boys is 24 kg. If the mass of the two boys is 50 kg. Find the mass of the third boy. |
| 19 | Using a ruler, a pencil and a pair of compasses only. Construct an angle of 75°   | 20 | Use the distributive property to workout (126÷3) + (27÷3)  |

## **SECTION B (60 MARKS)** At a birthday party attended by guests. 2x b) If guests 21 32 took Pepsi quests took Mirinda (M) only, (x+10) altogether, how many pupils guests took Pepsi (P) only. x guests took took both Mirinda and Pepsi? both Mirinda and Pepsi while 2 guest took (2 Mks) none of the two drinks. a) Use the above information complete the Venn diagram below. $n(\Sigma)$ 2 Mks n(M)n(P)c) How many guests attended the party? (1 Mks) 2xΧ b) Write the given number above in a) Given the number 2,045. Show 22 the number on the abacus below. scientific notation. (2 Mks) TH (2 Mks) c) Expand the given number using exponents. (2 Mks)

| 23 | Teacher Venekent went to the market and bought the following items. |  |  |  |  |  |
|----|---|--|--|--|--|--|
|    | 2kg of sugar at Shs. 4,000 a kg.                                    |  |  |  |  |  |
|    | 500g of meat at Shs. 15,000 per kg.                                 |  |  |  |  |  |
|    | 12 mangoes at Shs. 1,000 for every                                  | 3 mangoes.   |  |  |  |  |
|    | 10 tomatoes at Shs. 3,000.  |  |  |  |  |  |
|    | a) How much did he spend altogether. (4 Mks)                        | b) If Teacher Venekent remained with shs.17,500, after buying all items, how much did he have at first? (1 Mk) |  |  |  |  |
| 24 | -   | and use it to answer the questions that  |  |  |  |  |
|    | follow. (2y-3) cm   | n  |  |  |  |  |
|    |   |  |  |  |  |  |
|    | (y-2) cm  |  |  |  |  |  |
|    | (y-2) cm (y+2) cm   |  |  |  |  |  |
|    | a) Find the value of y. <b>(2 Mks)</b>                              | b) Calculate the volume of the cuboid. (3 Mks)   |  |  |  |  |
|    |   |  |  |  |  |  |

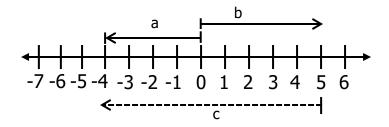
| 25 | A family eats a total of 93kg of rice for three consecutive days. It eats two more |
|----|--|
|    | kilograms than the previous day.   |

a) If p kg of rice are eaten on the second day, find the value of p. (3Mks)

b) How many kilograms of rice are eaten on the third day.

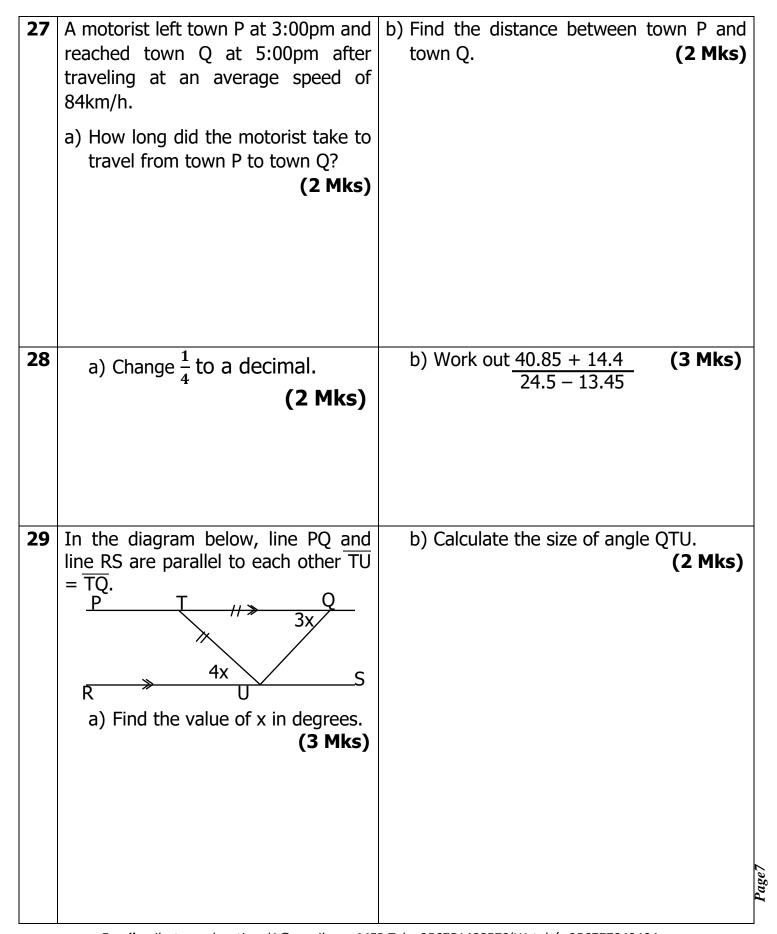
(2 Mks)

**26** Use the number line below to answer the questions that follow.



- a) Write the integers represented by the arrows. (1 Mk each)
- (i) a\_\_\_\_\_
- (ii) b\_\_\_\_\_
- (iii) c \_\_\_\_\_

b) Write a mathematical sentence represented on the number line above. (2 Mks)



| 30 | a) Using a ruler, a pencil and a pair of compasses only, Construct a triangle XYZ is which XY= 6cm, angle ZXY = 45° and angle XYZ = 60°. (4 Mks) | n<br>le  |
|----|--|--|
| 31 | a) If a = 3, b = -4 and c = 6. Find the value of <u>ab</u> c   | b) Alfred is thrice as old as Wilfred. In 2 years' time, the sum of their age will be 34 years. How old is Alfred now? |
| 32 | The pie chart below shows how Mr. Edison spends his salary.  Drinks 60° y 110° Savings Rent  | b) If he spends shs.36,000 on drinks. Find his salary. (2 Mks)   |
|    | a)Find the value of y in degrees.  (2 Mks)   | c) Express the food sector as a fraction. (1 Mk)   |