FORT PORTAL CITY COUNCIL EDUCATION DEPARTMENT

PRIMARY LEAVING MOCK EXAMINATION, 2024

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Random No.						Personal No.		

Candidate's Name: .....

Candidate's Signature: .....

District ID No:

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. 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. Any work done in pencil other than graphs and diagrams will **not** be marked.
5. **No calculators** are allowed in examination room.
6. Unnecessary **changes** in your work and hand writing that cannot easily be read may lead to **loss** of marks.
7. Do **not** fill anything in the table indicated: **"For Examiners' Use Only"** and boxes inside the question paper.

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. Work out: $24 \div 2$

2. Write 49 in Roman numerals.

3. Round off 19.826 to the nearest whole number.

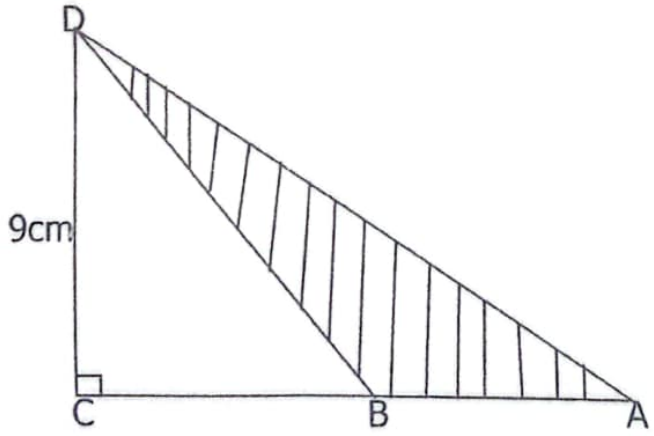
4. Given that: $t = 2$ and $c = {}^{-}3$. Find the value of $t^2 - c$.

5. Arrange the following integers in descending order $^{-}3$, 2 5, 0, 4, $^{-}1$.

6. Find the next number in the sequence below.
1, 2, 3, 5, 8, _____

7. Given that set P = {a, e, i, o}, how many subsets are in set P?

8. In triangle ACD, line AC = 15cm, line BC = 5cm. Calculate the area of the shaded triangle ABD.



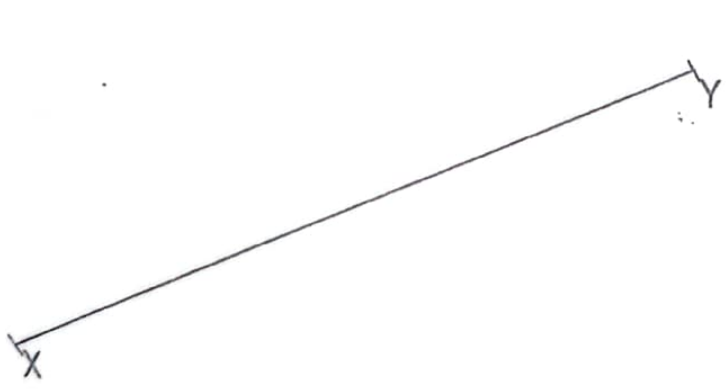
9. There are 30 eggs on a tray. How many eggs are on 124 trays?

10. The table below shows the ages of Madam Anita's children use it to answer questions that follow.

Name	Aisha	Juma	Amidu	Shakila
Age	15	8	17	12

What is the difference between the oldest and the youngest child.

11. Using a ruler, a sharp pencil and a pair of compasses only, drop a perpendicular line bisector from point Z to meet line XY at W.



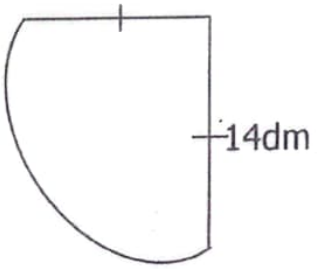
12. Given that $2^{2a} \times 2^4 = 2^6$. Find the value of a.

13. How many $2\frac{1}{2}$ litre cups can be got from a 20 litre jerrycan?

14. Solve for t: $14 - 2t = 8$.

15. If today is Wednesday, what day of the week was it 32 days ago?

16. Calculate the perimeter of the figure below. (Take $\pi = \frac{22}{7}$)

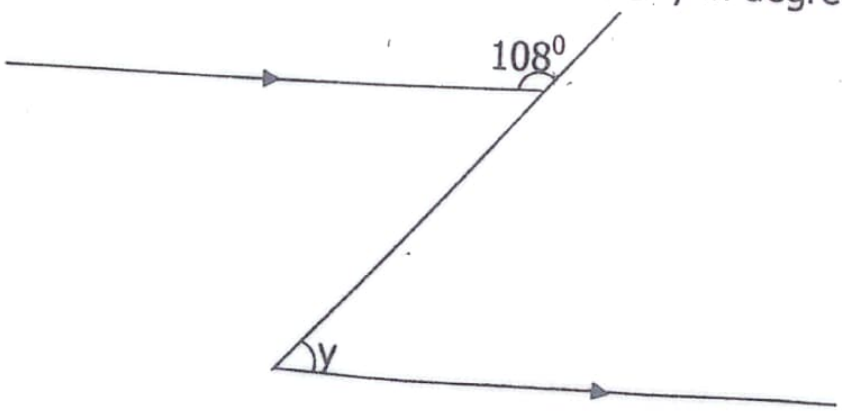


17. A car travelling at a speed of 50km/h leaves Fort portal at 8:00a.m and arrives in Kasese at 9:30a.m. How far is Kasese from Fort portal?

18. Musa had Ug Shs. 210000. he exchanged it into Kenya Shillings at the "LIVE AND TAKE" forex bureau at the rate of 1K Sh. = Ug Shs. 30. How much Kenya Shillings did he get?

19. Express 2310 hours in 12 hour clock system.

20. In the diagram below, find the value of y in degrees.



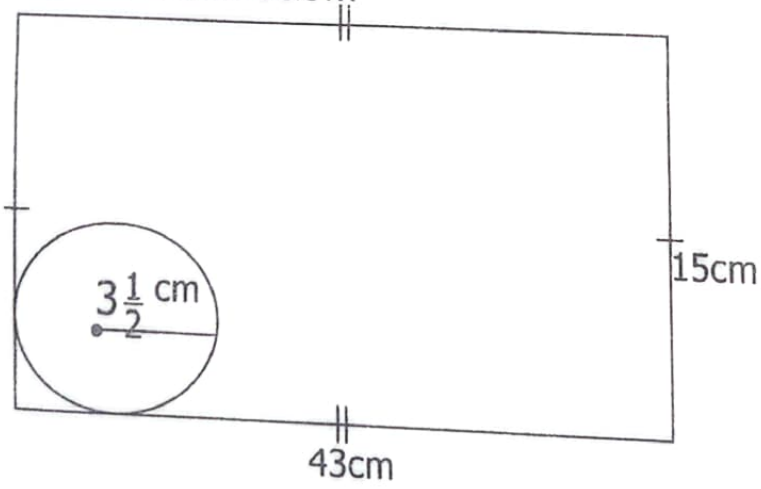
SECTION B : 60 MARKS.

Answer **all** *questions in this section.*
Marks for each question are indicated in the brackets.

21. (a) Write 0.3636 . . . as a common fraction in its simplest form. *(2 marks)*

(b) Work out: $\dfrac{3.6 \times 0.3}{1.2 \times 0.09}$ *(3 marks)*

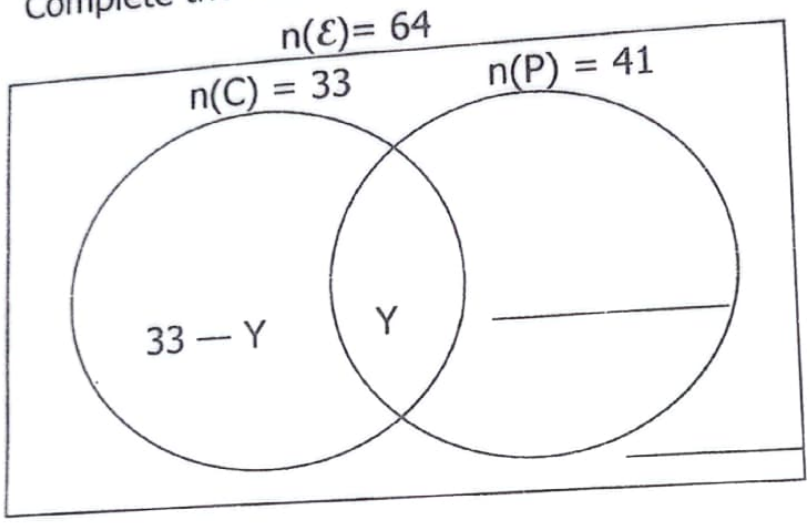
22. Alien makes circular pancakes from a rectangular dough measuring 40cm by 15cm as shown below.



(i) How many pancakes can he get from the dough above? *(2 marks)*

23. In Rwengaju village of 64 farmers all grow bananas, 33 grow cassava (C), 41 grow potatoes (P), 8 farmers grow bananas only, y farmers grow all the three crops.

(a) Complete the Venn diagram below using the above information. *(2 marks)*



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

24. Moses went shopping and bought the following items as shown in the table below.

ITEM	QUANTITY	UNIT COST	TOTAL COST
Rice	$\frac{1}{2}$ kg	Shs. .....per kg	Shs. 6000
Meat	1500gm	Shs. 14000 per kg	Shs. .....
Sugar	2kg	Shs. 4000 @ kg	Shs. 8000
Bread	2 loaves	Shs. 5000 a loaf	Shs. .....
TOTAL EXPENDITURE			Shs. .....

(a) Complete the table above. *(4 marks)*

(b) If he was given a discount of 10%, how much did he pay for all the items?

(2 marks

25. In a P.7 class of Kangeya Primary School, $\frac{3}{5}$ of the pupils are girls, $\frac{1}{3}$ of the girls and $\frac{1}{4}$ of the boys like debate. There are 27 pupils in the class who like debate. Find the total number of pupils in the class. *(5 marks)*

26. The time table below shows a journey made by the bus from Fort Portal to Kasese.

Bus terminal	Arrival	Departure
Fort portal	———	8:00a.m
Rubona	9:00a.m	9:45a.m
Nyakigumba	11:00a.m	12:00noon
Rwimi	12:20p.m	12:40p.m
Kasese	1:00p.m	

(a) At what time did the bus set off from Fort Portal. *(1 mark)*

(b) How long did the bus take to travel from Fort Portal to Nyakigumba. *(2 marks)*

(c) If the distance from Fort Portal to Kasese is 80km. Calculate the bus' average speed for the whole journey. *(3 marks)*

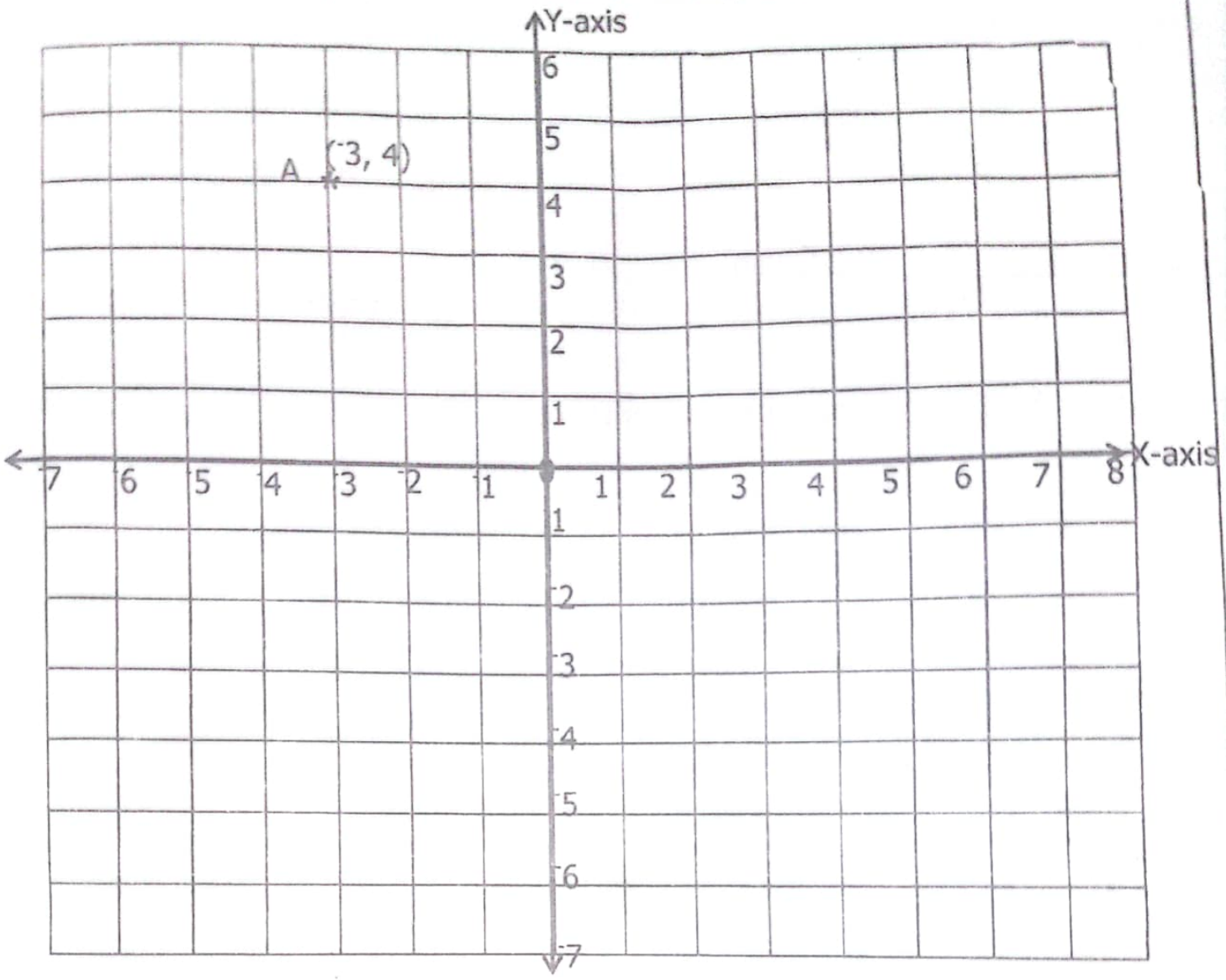
Turn over

27. The interior angle of a regular polygon is 120^0 more than its exterior angle.

(a) Work out the size of each exterior angle. *(2 marks)*

(b) Find its number of sides. *(2 marks)*

28. Study the co-ordinate graph below and answer the questions that follow.



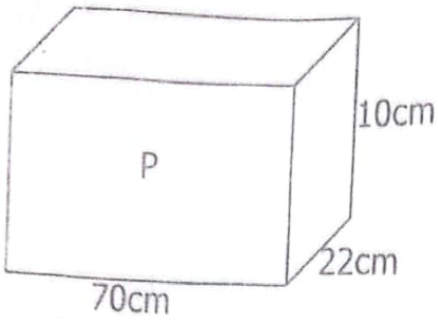
(a) Plot the co-ordinates of points. *(2 marks)*

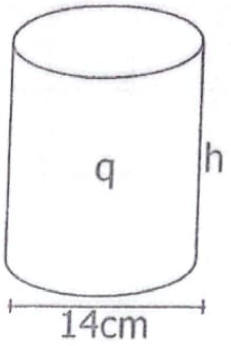
(i) B ($^{-}5$, $^{-}3$)

(ii) C (5, $^{-}2$)

(b) Join the points A to B, B to C and C to A to form a geometric figure and name the figure formed. *(2 marks)*

9. Given that the two containers below have the same volume. Study them and answer the questions that follow.





(a) Find the volume of container P above. *(2 marks)*

(b) Calculate the height (h) of container Q $\left(\text{Take } \pi = \frac{22}{7}\right)$ *(3 marks)*

30. (a) Find the solution set for inequality.
$2a > 4$

(2 marks)

(b) Solve for y in the equation below.
$2(y - 4) - 3(3y - 5) = 0$

(3 marks)

31. (a) Multiply: $1101_{two} \times 11_{two}$.

(2 marks)

(b) Find the place value of **3** in the number 324_{five}.

(1 mark)

(c) Write 834.6 in scientific notation.

(2 mark

32. Using a ruler, a pencil and a pair of compasses only, construct an isosceles trapezium LINE in which line EL = 7cm, $\angle NEL = \angle ELI = 60^0$ and line NE = LI = 3.5cm. *(4 marks)*

(b) Measure line NI in centimetres. *(1 mark)*

END