P.7 2024 EXAMINATION 2024 SPECIAL PRE MOCK SET 4
MATHEMATICS

Time allowed: 2 Hours 15 Minutes

						Person No.		
			Random No.					

Candidate's Name ....

Candidate's Signature ....

District Name...

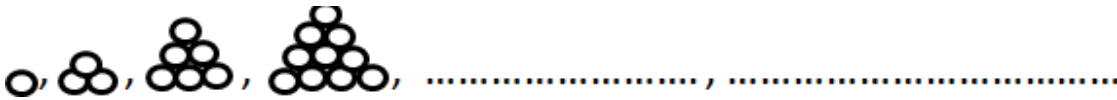## Read the following instructions carefully:

1. This paper has **two Sections: A** and **B**.

2. Answer **all** questions. All answers to both sections **A** and **B** must be written in the spaces provided.

3. All answers must be done using a blue or black ball-point pen or fountain pen.

4. Unnecessary changes of work may lead to loss of marks.

5. Any handwriting that cannot be easily read may lead to loss of marks.

6. Do not fill anything in the boxes indicated: **"For Examiners' Use Only"** and those inside the question paper.

Qn. No.	Marks	EXRS' NO.
FOR EXAMINERS' USE ONLY		
01 -05		
06 - 10		
11 - 15		
16 - 20		
21 - 22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

SECTION A (40 MARKS)

1. Divide 100 by 5

2. Use dots to find the next number in the sequence.

3. Expand 43.5 using powers of ten.

4. Find the supplement of 39°.

5. How many lines of symmetry does a circle have?

6. Round off 67.49 to the nearest whole number.

7. Simplify $3^2 + 2^2$

8. Solve: $x + 3 = 2x - 5$

9. Write 0.00705 in scientific notation.

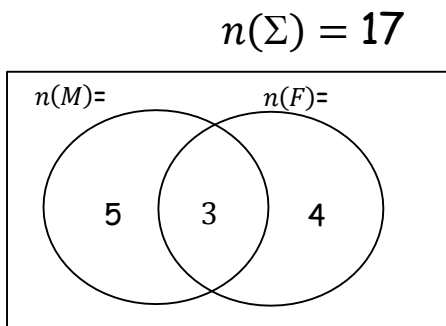10. The distance between two towns is 45km; this distance is 5cm on a map of Uganda. What is the scale of the two towns?

11. Using a protractor, draw an angle of 115° in the space below.

12.   Express 0.75 as a ratio in its lowest term.

13. Simplify $a + 2b - 3b - 2a$
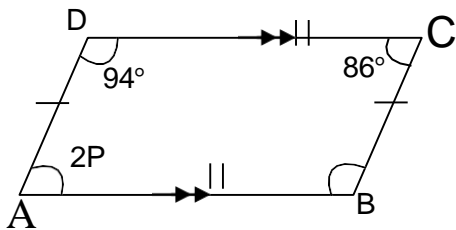
14. Use the Venn diagram
    below:

$$n(\Sigma) = 17$$

$n(M)=$ $n(F)=$

5   3   4

Find n(M∩F)′

15.   The probability of passing a paper is 0.7. Find the probability of failing it.

16. Divide: $2 \div 3 =$ __(finite 5)

17. Find the volume of a cube of side 5dm.

18. Jamwa ran 100m in only 10seconds; express his speed in km/hr.
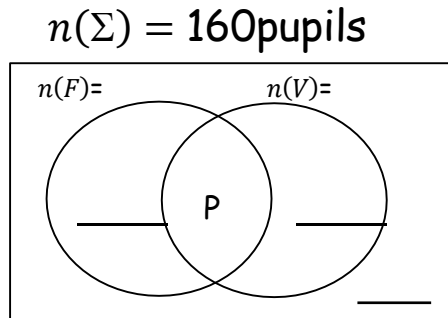
19. Use the figure below to find P

20. Use distributive property to work out: $(57.4 \times 6) + (4.2.6 \times 6)$

21. In a class of 160 pupils, 65 like volley only, 55 like football only, 25 like neither of the two games while p like both games.

a) Use the above information to complete the Venn diagram below. (**3marks**)

$n(\Sigma) = 160pupils$

$n(F)=$ $n(V)=$

P

b) Find p.   (**2marks**)
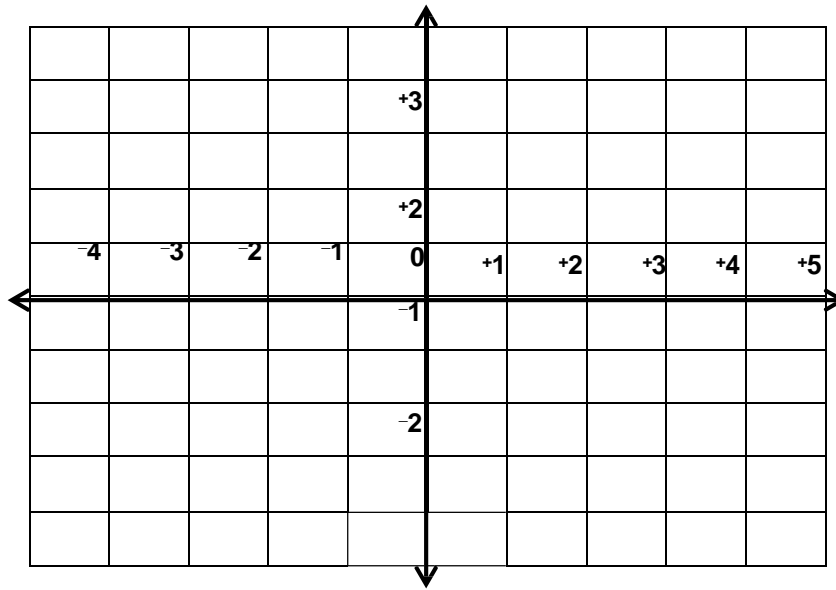
c) Find the probability of those who like only one game to be the captain.

(**2marks**)

22. Matilda bought a tray of eggs at sh. 500 per egg on her way 6 eggs broke and she sold the remaining eggs at sh. 600 per egg. Calculate the percentage loss.   (**4□□□ks**)

23. Plot the given points on the grid below: A($^-$2, $^-$2) B($^+$4, $^-$2) C($^+$4, $^+$2) D(0, $^+$2) (**2marks**)

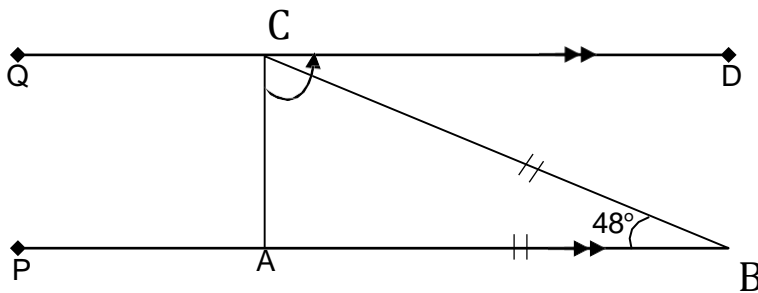(b) Join the points A to B to C to D to A.
   (**1mark**)

(c) What special name is given to figure formed?   (**1mark**)

24. In the figure below, ABC is a triangle, $BC = AB$, PAB is parallel to QCD and angle
$ABC = 48°$.
Find the size of angle ACD.   (4 marks)

25. Jadwong bought a receipt book numbered 634201 to 634300 to be sold to anybody who would attend the school music concert. Each receipt was sold at $sh.$ 5000 for whoever enters the concert. If all the receipts were sold:

a. How many people attended the concert? (**2marks**)

b. How much money was collected for the concert? (**2marks**)

26. (a) Write ninety-four thousand nineteen in numerals. (**2marks**)

(b) Write a single numeral for $(3 \times 10^3) + (7 \times 10^1) + (9 \times 10^0) + (8 \times 10^{-1})$
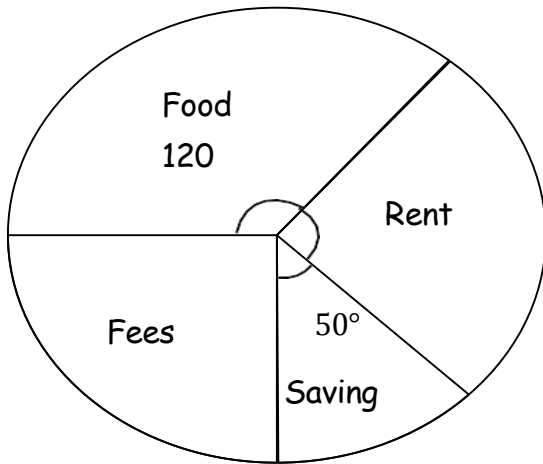
(**3marks**)

27. (a) Subtract: $3p - 4y \ from \ 2y + p.$ (**2marks**)

b) Find the product of 0.22 and 0.5.   **(2marks)**

28. Study the pie-chart below carefully and answer the questions.

(b) If a parent spends 220,000 on food. How much does he earn per month?

(*3marks*)

(c) What fraction of his salary does he spend in its lowest terms?   (*2marks*)

29. In a parents' meeting at a certain school the ratio of male to female parents was 3:5 respectively, if 30 female parents attended the meeting.
  a) How many male parents were in the meeting? (**3marks**)

 b) If 0.7 of the male parents were below the age of 40. How many male parents were above the age of 40?

(**2marks**)

30. Solve: $y - 1 = 2y + 5$ (2marks)

  (b) Find the value of P in 3(2+p) < 15 (**3marks**)

31. What is an equilateral triangle?

  Find the value of x if one side of an equilateral triangle is (3x-4) cm while the other is
  (x-2) cm

32. a) Greatest common factor of the first three odd numbers

b) Calculate the LCM of 6 and 8.

END