

BUTAMBALA DISTRICT ACADEMIC BOARD

PRIMARY LEAVING MOCK-2023

MATHEMATICS

DURATION: 2 HOURS 30 MINUTES

Random No:	Personal No:
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Index Number:

Candidate's name: _____

Signature: _____

School: _____

District: _____

READ THE FOLLOWING INSTRUCTIONS CAREFULLY

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO

Read the following instruction carefully

1. This paper has two sections : A and B.
Section A has 20 questions and section B has 12 questions. The paper has 15 printed pages.
2. Answer **all** questions. All the working for both Sections A and B must be shown in the spaces provided
3. 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.
4. **No calculators** are allowed in the examination room.
5. Unnecessary **changes** in your work and writing that cannot be read easily may lead to **loss of marks**.
6. 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
N0		
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)

1.

Work out:

$$\begin{array}{r} 6 \ 5 \\ - 5 \ 4 \\ \hline \\ \hline \end{array}$$

2.

Simplify : $\frac{1}{2} + \frac{4}{5}$

3.

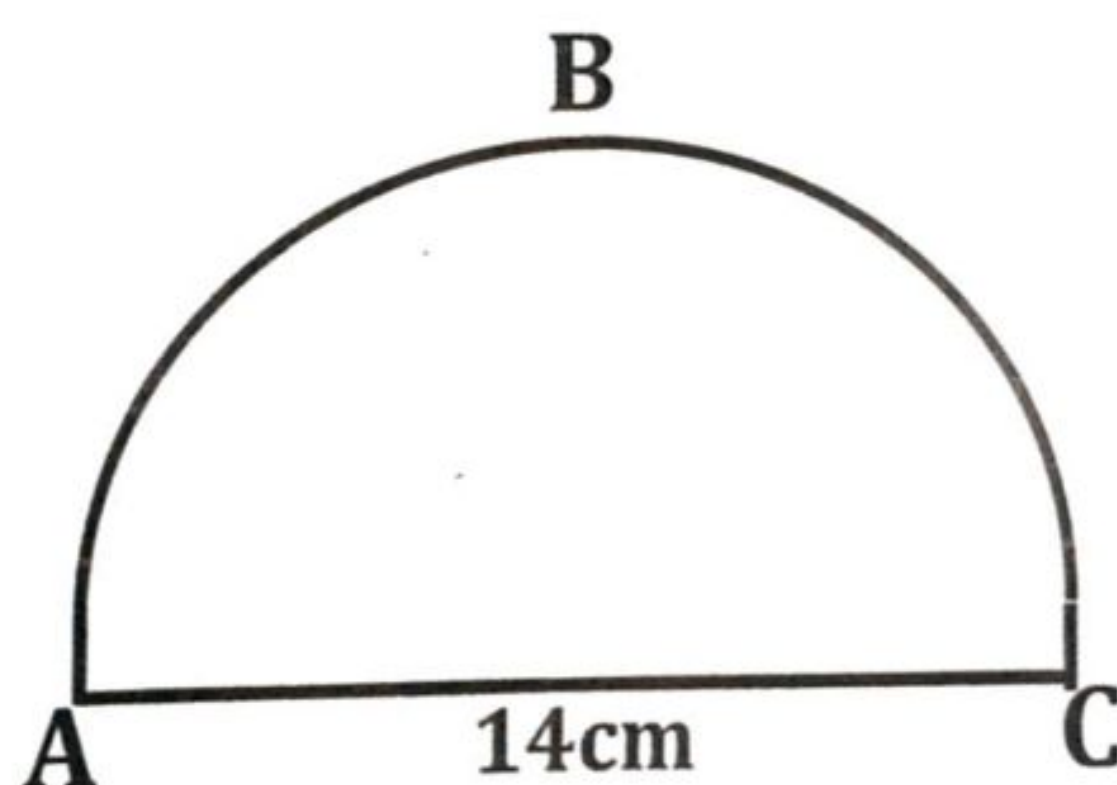
Given that set

$$Q = \{ 2, 3, 4, 5 \}$$

Find the number of proper subsets in set Q.

4.

Find the perimeter of the semi- circle given below.



5.	A box contains 122 books , if I have 41, 218 boxes , how many books are there altogether?	
6.	Simplify : $5ab - 2xy - ab + 7xy$	7. Write 40, 763 in words.
8.	If $2^p \times 2^3 = 64$, Find the value of P .	
9.	In the space provided below , construct an angle of 105° .	
10.	Change 250gms to kilograms.	

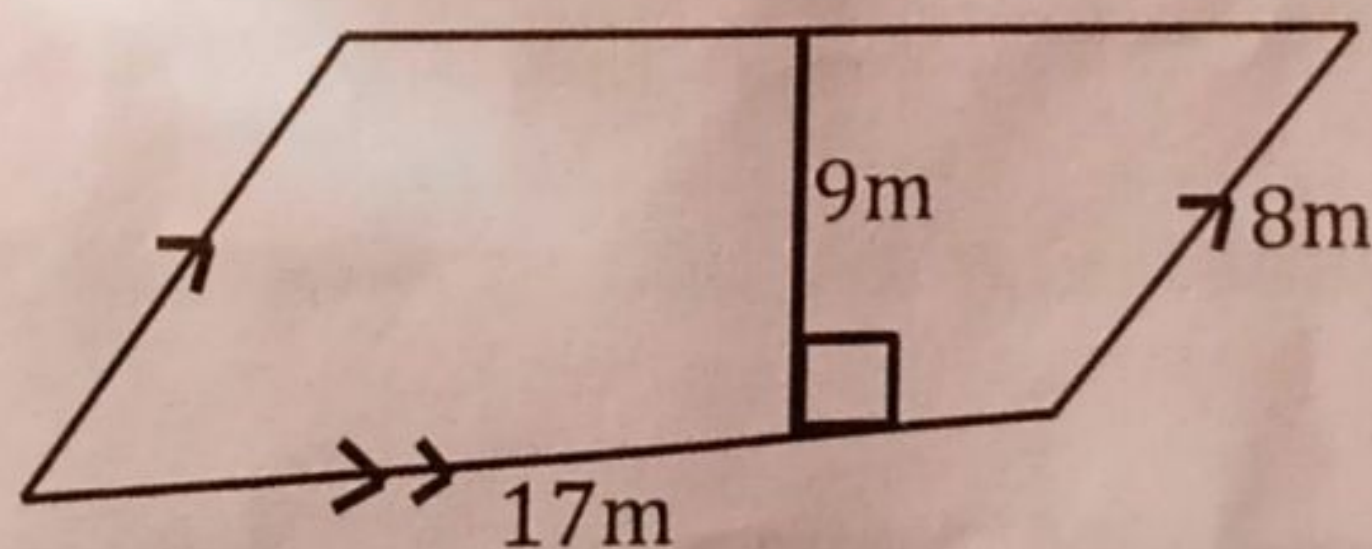
11.	A wheel has a diameter of 70cm. How many revolutions does it make to cover a distance of 2.2km?
12.	Write 49 in Roman Numerals.
13.	Nakamatte who is 41 years old today, was exactly two and a half times as old as Mwinu six years ago. Find the age of Mwinu today.
14.	Use distributive property to work out $(13 \times 2.5) + (13 \times 7.5)$
15.	A bag has 16 white balls and the rest are red, all of the same size. If the probability of picking a red ball from the bag is $\frac{5}{9}$, find the total number of balls in the bag.

16. A mathematics test which took $2\frac{1}{2}$ hours started at 12:40pm . At what time did it end in 12 hour clock system?

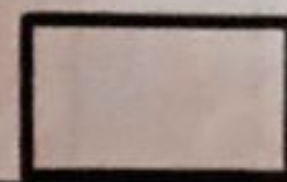
17. Round off 34.978 to the nearest tenths.

18. Express 72 k.p.h to m/sec.

19. Find the area of a parallelogram below.



20. Write 0.436 in scientific notation.



SECTION B (60 MARKS)

21. a) Using a ruler, pencil and a pair of compasses only, Construct a triangle **PQR** with angle **PQR** = 45° , angle **QPR** = 60° and **QP** = 6cm.
(4 marks)

- b) Measure line **QR**.

(1 mark)

22. Use the number 3, 418 to answer the following ;

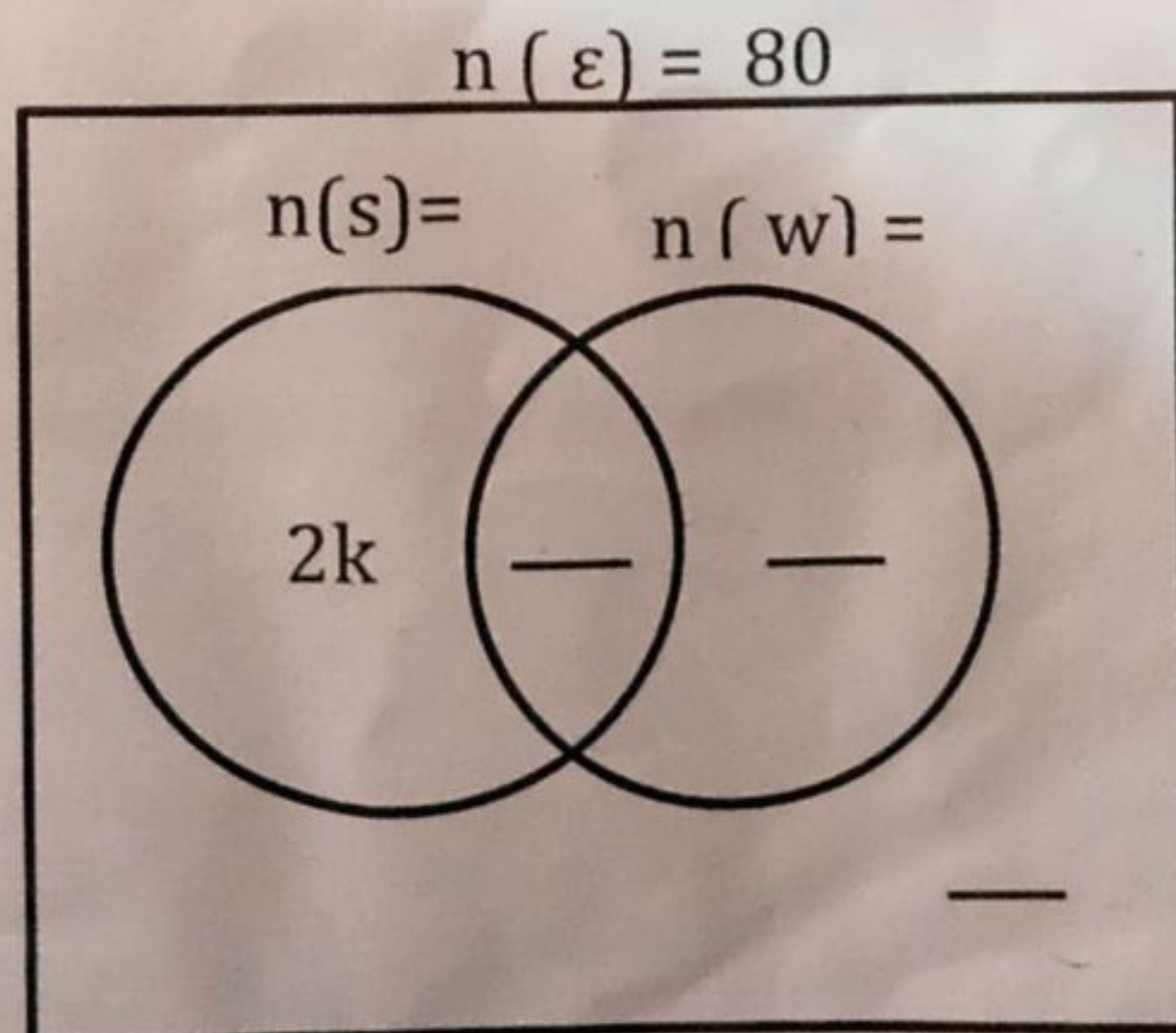
a) What is the place value of 4 ? (1 mark)

b) Find the value of 8 . (2 marks)

c) Write the number in expanded notation using powers of ten. (2 marks)

23. Out of 80 pupils , $2k$ like soda (**S**) only , $(k + 9)$ like water (**W**) only , $(k - 4)$ like both soda and water while 4 like neither of the two drinks.

a) Complete the venn diagram below using the above information. (3 marks)



(2 marks)

b) Find the value of k .

c) What is the probability of picking at random a pupil who likes water ? (1 mark)

24. Shs . 7000 is shared among Aisha , Barbra and Christine such that Barbra gets sh. 600 less than Aisha and Christine gets twice what Aisha got. How much does each get? (5marks)

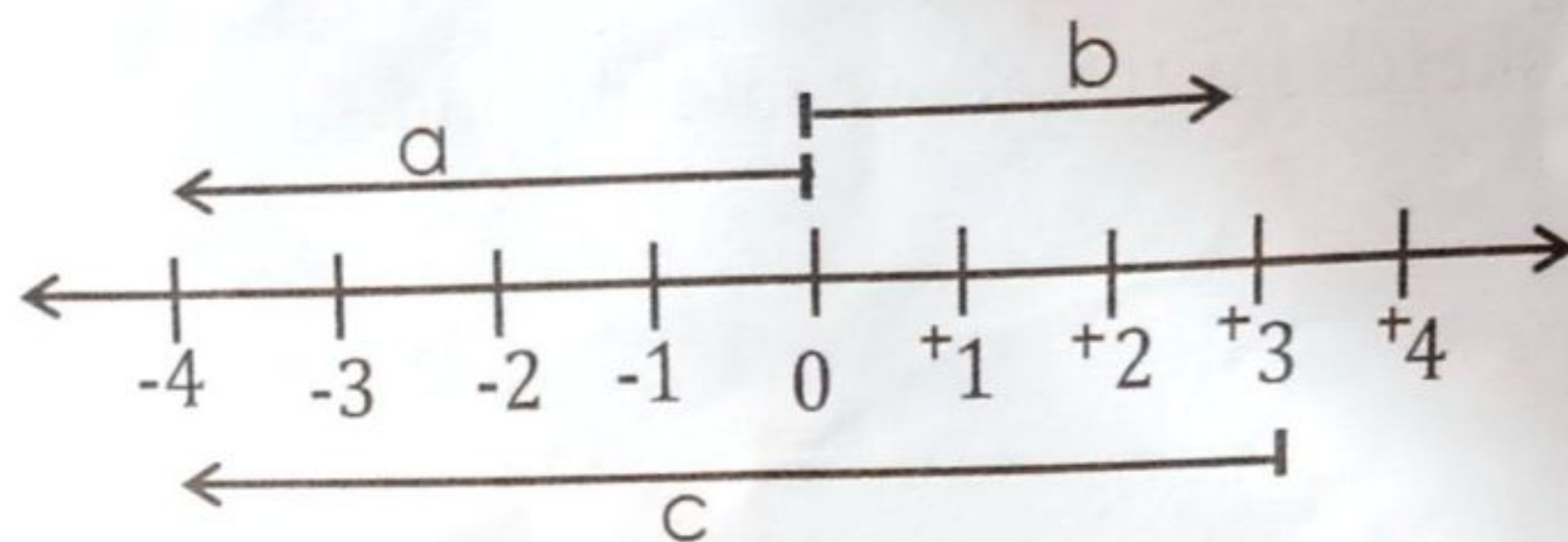
25. Town X is 42km East of town Y and Z is 35km from X on a bearing of 230° .

a) Draw a sketch for the above information. (1 mark)

b) Using a scale of 1cm to represent 7km, draw an accurate diagram showing the above information. (3 marks)

c) Find the shortest distance between Y and Z. (1 mark)

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



a) Identify the integer represented by arrow; (1 mark each)

i) a _____ ii) b _____ iii) c _____

b) Write the mathematical sentence for the above illustration (2 marks)

27 A woman set off from home at 8:30 am and drove at an average speed of 60km/hr for 2hours and 30 minutes to see a sick person in a hospital . She spent there I hour 30 minutes and returned home at an average speed of 75km/hr.

a) Calculate the total time the woman spent on the whole journey. (2 marks)

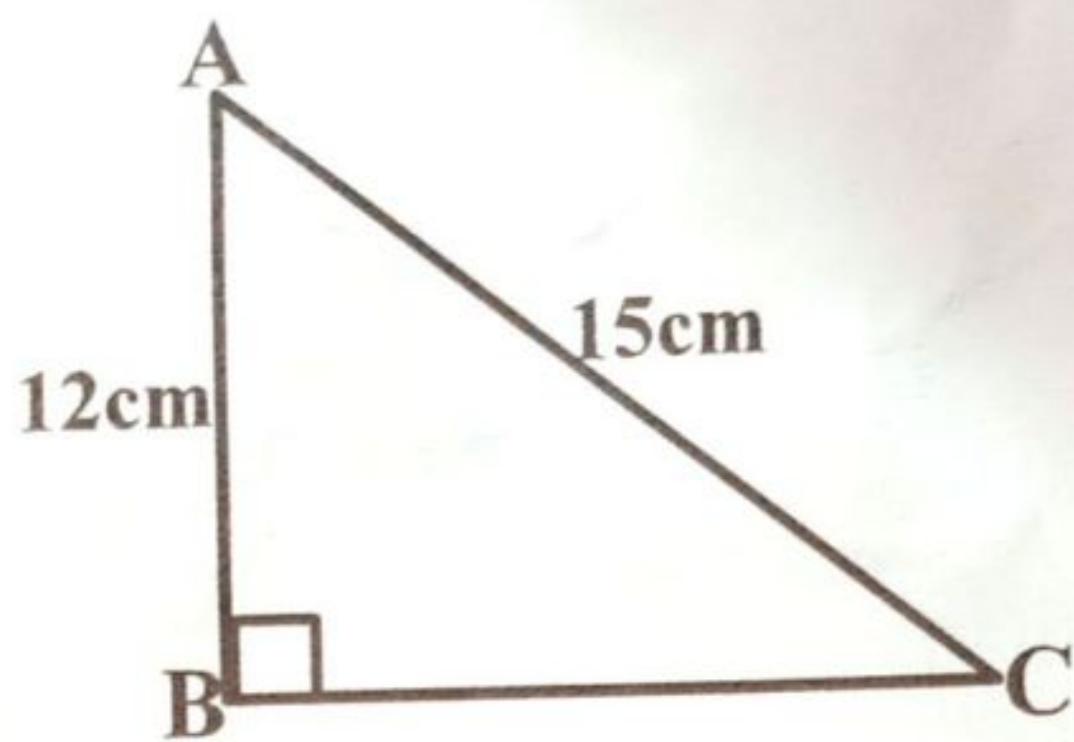
b) What was the total distance the woman covered? (2 marks)

c) At what time did the woman reach home? (1 mark)

28. a) Find the square root of $1\frac{11}{25}$. (2 marks)

b) Find the square of the value of 2 in the number 1523. (2 marks)

29. Study the figure given below carefully and use it to answer the questions that follow;



- a) Find the length BC

(3 marks)

- b) Find the Area of the polygon.

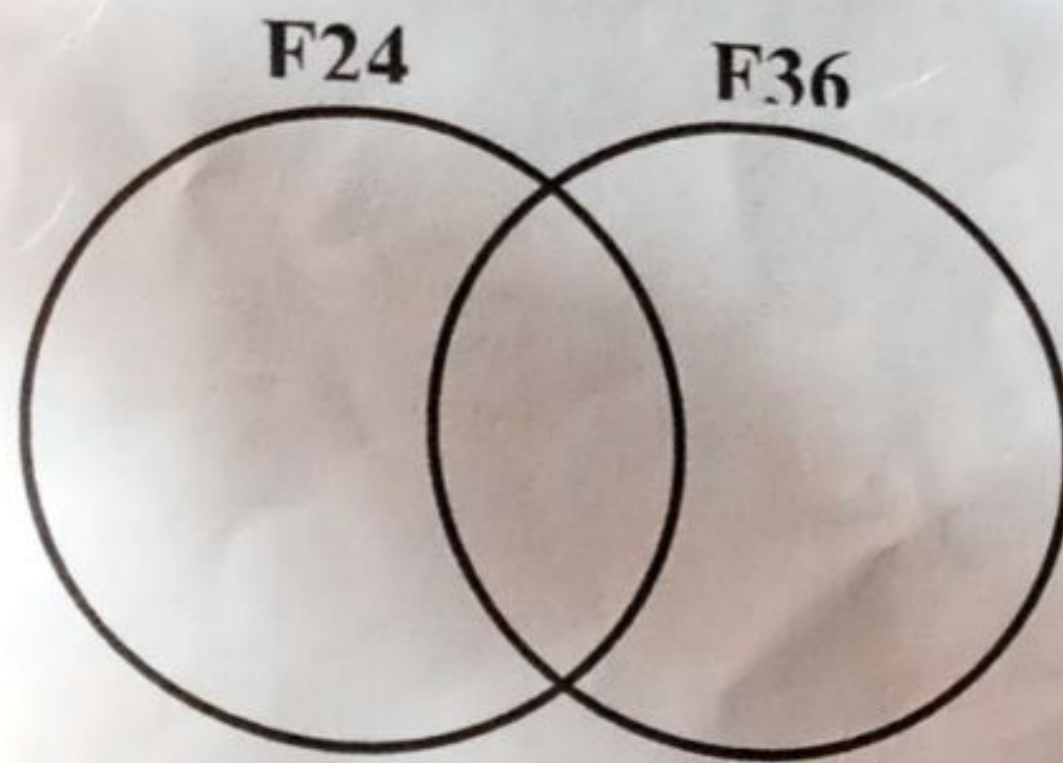
(2 marks)

30. a) Prime factorise the following numbers and give your answer in set notation . (2 marks each)

i) 24

ii) 36

- b) Represent the above prime factors on the venn diagram below. (3 marks)



31. a) Solve for X in the number

$$102_x = 27_{\text{ten}}$$

(2 marks)

- b) Express 23_{five} to binary base.

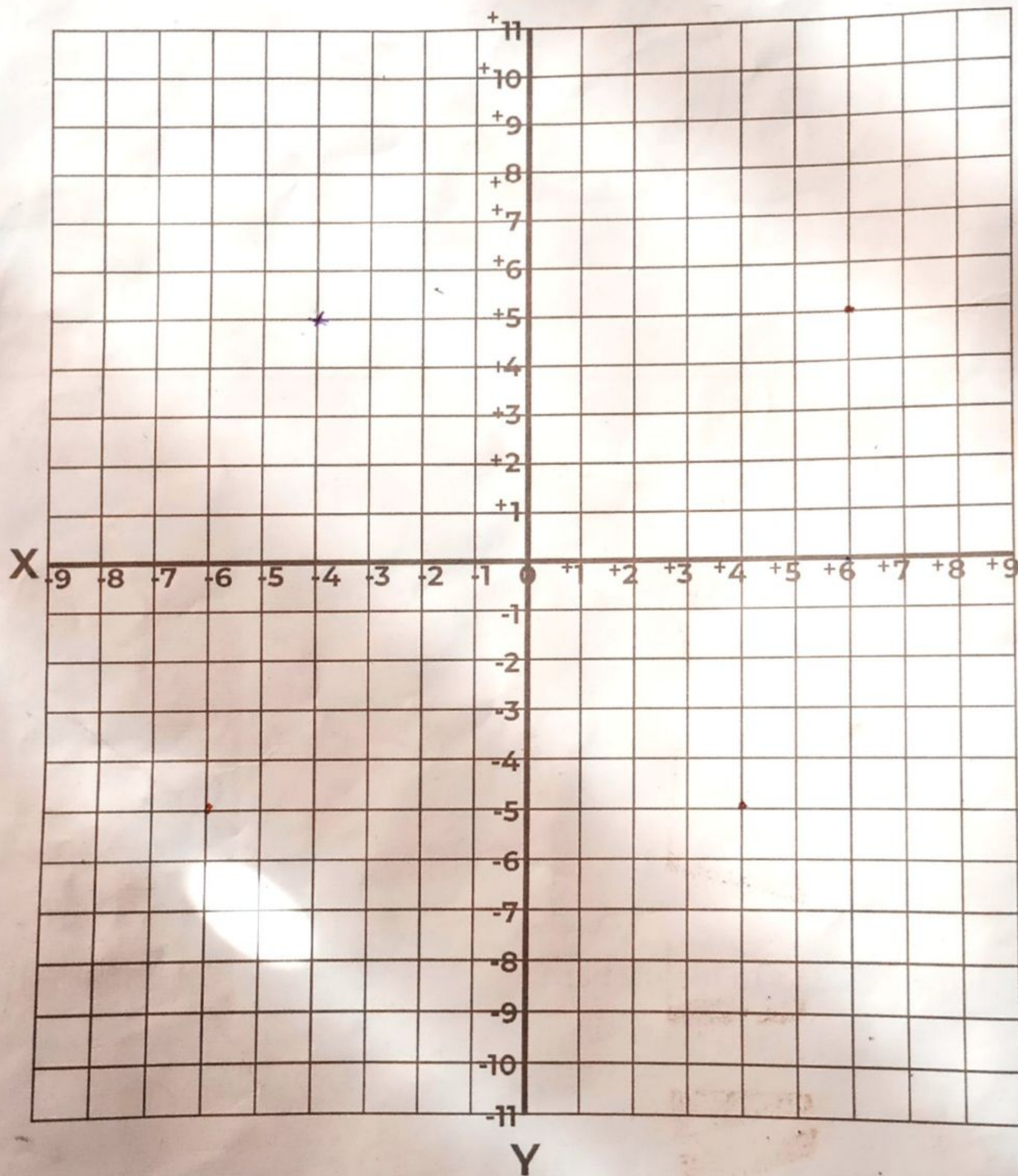
(3 marks)

32. Use the given grid below to

(4 marks)

a) Plot the following points :

L (-4,5) M (6,5) , N (4,-5) and P (-6, -5)



Name the geometrical polygon formed.

(1 mark)

END