NAMILYANGO JUNIOR BOYS SCHOOL

P. 7 MATHEMATICS PRE-PLE 2024

SET FIVE

Time allowed: 2 Hours 30 Minutes

INDEX NO.

Name: ....

Stream: ....   Date: ....

Read the following instructions carefully:

1. This paper has **two** Sections: **A** and **B**.
2. Section **A**, has **20** short answer questions (40 marks)
3. Section **B** has **12** questions (60 marks).

   Answer **ALL** questions. All answers to both Sections **A** and **B** must be written in spaces provided.

   All answers must be written using a blue or black ballpoint pen or ink. Diagrams should be drawn in pencil.

   Unnecessary alteration of work will lead to loss of marks.

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

3. Do not fill anything in the box indicated for examiner's use only.

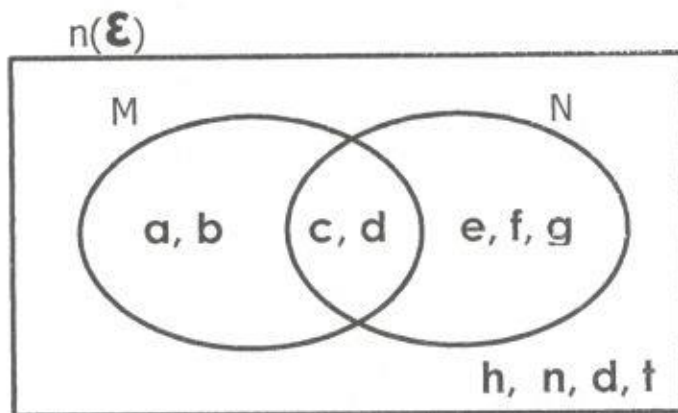| FOR EXAMINERS' USE ONLY		
QN. NO	MARK	SIGN
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

A	
B	
TOTAL	

1

1. Work out: 23 + 43

2. Round off 4356 to the nearest tens.

3. Simplify: $5m^3 \times 3m^2$

Use the Venn diagram below to answer question 4.

4. Find $n(M \cup N)^1$

5. Work out: $\frac{3}{4} \div 1\frac{1}{2}$

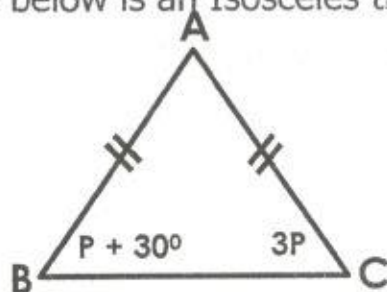6. Given stand for 40 apples, how many apples are represented by

 ?

7. Find the next number in the sequence below.

0, 1, 5, 14, 30, _____

8. The mass of an object is 0.56kg Express this weight in grammes.

9. The figure below is an Isosceles triangle. Find angle ABC.

10. The medium of 5 consecutive integers is ⁻1. Find the integers.

11. By selling a dress, at sh. 18,000, a trader made a loss of sh.2,000. Calculate his percentage loss.

12. Work out: 0.25 x 0.3.

13. A forty-minute lesson ended at 1.20p.m. At what time did it start?

14. The distance around a circular piece of land is 44 metres. Calculate its diameter.

15. The mean of 4, 5, 3 and y is 4. Find the value of Y.

16. Given that $\{2_1, 2_2, 3_1, 3_2\}$ and $y = \{2_1, 2_2, 2_3, 3_1\}$. Find the G.C.F of p and y.

17. Using a ruler, a pencil and a pair of compasses only, construct an angle of 22.5^0.

18. A car uses 6 litres of petrol every day. How many $\frac{1}{2}$ litre bottles of petrol does the car use in the day?

19. ABC is a triangle. AC and BE are heights of the same triangle BD=12cm. AC = 10cm, BE=8cm. Find the length of AD.
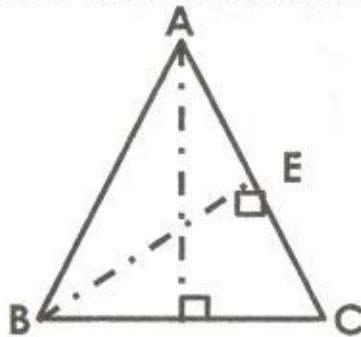

20. Atimas withdrew a bundle of one thousand shilling notes from the bank. If the last note identification number was PW 4688448, find the identification number of the first note.

21.   AP. 7 picnic of 52 candidates, 25 ate meat (M), (x + 20) ate chicken (c),
       15 ate both meat and chicken while 5 did not eat either of the sauce.
    a) Use the given information to complete the Venn diagram below. **(2 marks)**

n(ε)

M _____ 15 _____ C

5
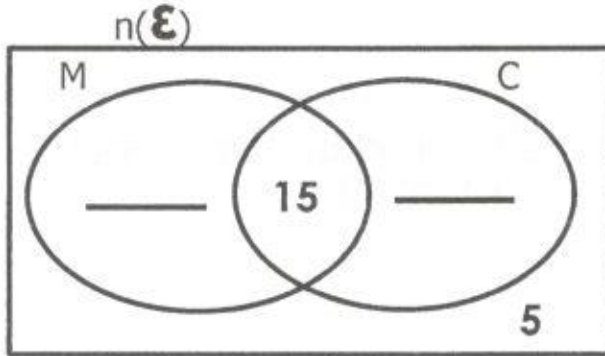
b) Solve for the value of X.   **(2 marks)**

c) Find the probability that a guest who was picked at random did not eat
   chicken.   **(1 mark)**
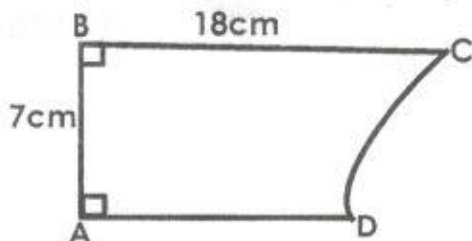
22. a) The place value of 8 in a numeral is hundredths. What is its value?
                                                             (2 marks)

b)   Find the expanded number below.   **(2 marks)**

      $(9 \times 100) + (5 \times 10) + (3 \times 0.1) + 4 \times 0.01)$

23. Study the figure below and answer the questions that follow.

a) Find the length of DC.   (2 marks)

b)   Work out the area of the figure above   (3 marks)

24.   A car travelling at 100 km/hr takes 3 hours 36 minutes to travel from village **X** to village **Y**.
a) Find the distance from village **X** to village **Y**.   (2 marks)

b)   If the driver starts his journey from village y at 2:00p.m. at which speed must he drive to reach village X at 6:00p.m. without stopping. **(3 marks)**

25. a) Find the number of sides of a regular polygon that has 12 right angle

(2 marks)

b)   Calculate the size of angle **r** in the diagram below.   **(3 marks)**
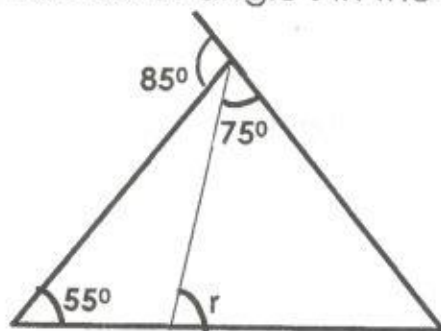
26.   Nakato rolled a wire of 1100m round a circular log of radius 7dm. In how many revolutions was the wire rolled?   **(4 marks)**

7. a) Solve for p: $\dfrac{3}{p+2} = \dfrac{2}{2p-2}$ **(3 marks)**

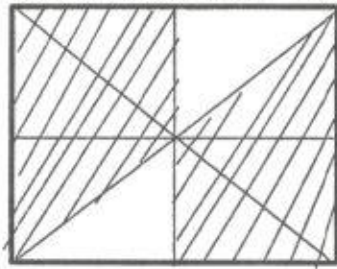b) Solve and find the solution set for $2k + 3 \leq 9$ **(3 marks)**

28. (a) Using a ruler, a pencil and pair of compasses only, construct a square inside the circle of radius 4 cm.   **(4 marks)**

(b) Find the area of square formed.   **(1 mark)**

29. The shaded part in the figure below shows the number of girls in the school. Use it to answer the questions that follow.

a) Find the percentage of the boys in the school. **(2 marks)**

b) If the school has 500 boys, how many girls are in the school? **(3 mark)**

a) The least number of books that can be divided by either 18 or **n** leaving 4 as a remainder is 40. The GCF of 18 and is 6. Find the value of n. **(3 marks)**

b) Express 140 as a product of its prime factor. **(2 marks)**

31. The average weight of four boys is 56kg. When two other boys join the group, the average weight becomes 52kg. The sixth boy is 8kg heavier than the fifth boy. Find the weight of the sixth boy. **(6 marks)**

32. The graph below shows the cost of different items in Mr. Mutyaba's shop.
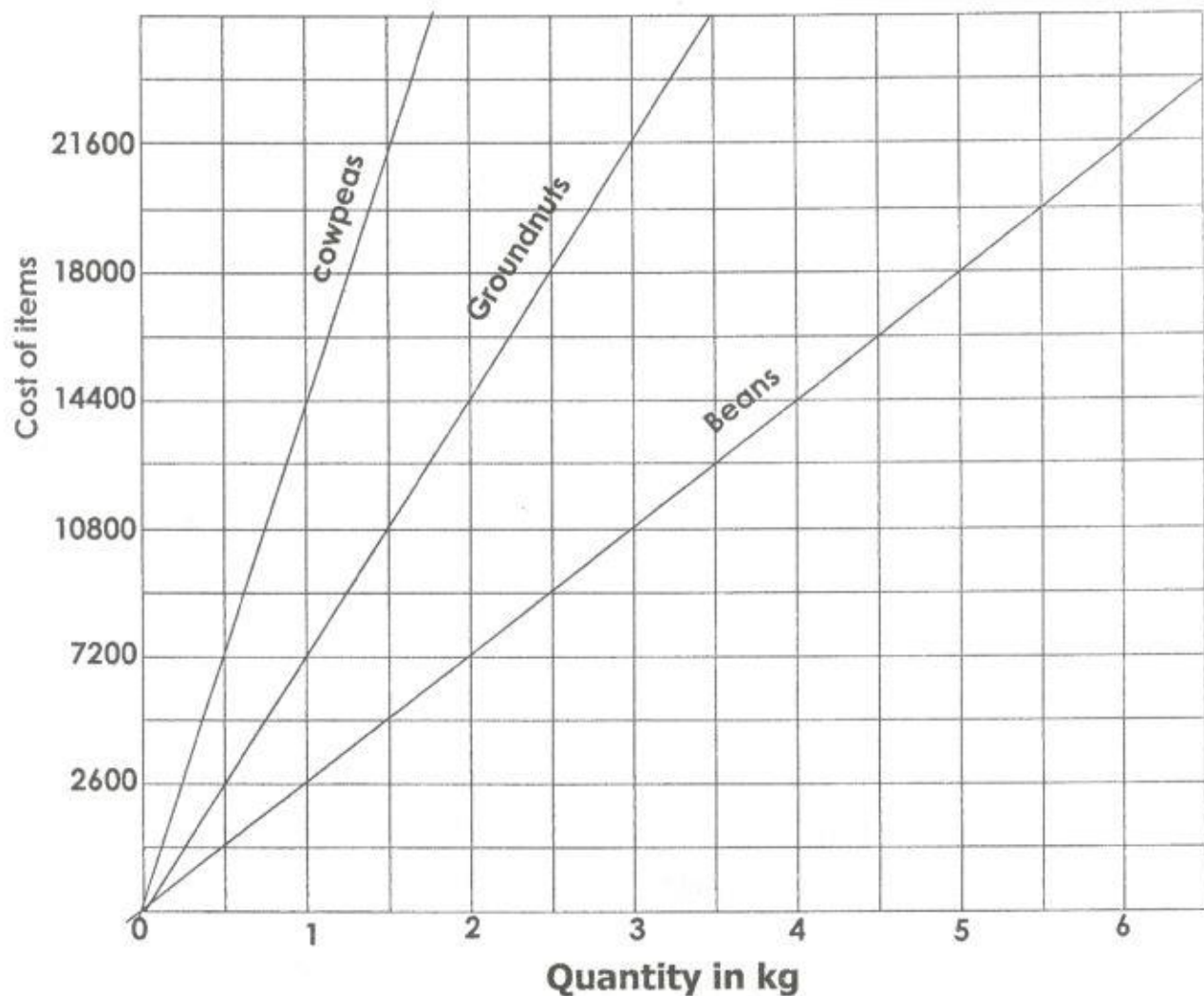
a)What is the most expensive item on the graph? **(1 mark)**

b) What is the total cost of 2 $\frac{1}{2}$kg of beans and 2kg of groundnuts.

(2 marks)

c) Musa bought 750g of cowpeas and 1,500g of beans. How much did he pay?

(2 marks)

END