CREAMHILL SCHOOLS

MULAGO

P.6

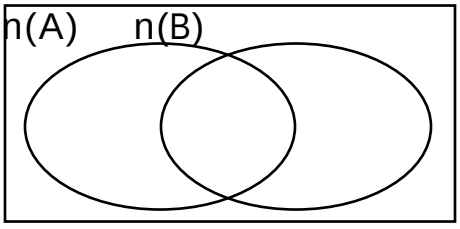
MATHEMATICS

SECTION A (40MARKS)

1. Work out: 24 + 75

2. Shade $n(A)^{l}$ on the venn diagram below.

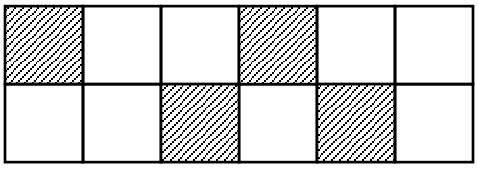
$n(\Sigma)$



3. Write 2147 in words.

4. Simplify: 2p + 3p - p

5. Write the shaded fraction on the diagram below in its lowest form.



6. Convert 212_{three} to base ten.

7. Change 4800g to kg.

8. Work out $^{-}2 + {}^{-}3$

9. Simplify: $\frac{1}{4} + \frac{1}{5} + \frac{1}{5}$

10. Express 2494 in scientific notation.

11. John drove his car for 120km from Kampala to Masaka in 3 hours, what was his average speed?

12. Find the next number in the sequence below;

16 , 9 , 4 , 1 , ____

13. Given that ⚽ represents 20 balls. How many balls are represented by ⚽⚽⚽⚽?

14. Use a pair of compasses, a ruler and a pencil only to construct an angle of 60^{o}.

15. Write down the prime factors of 36 in subscript form.

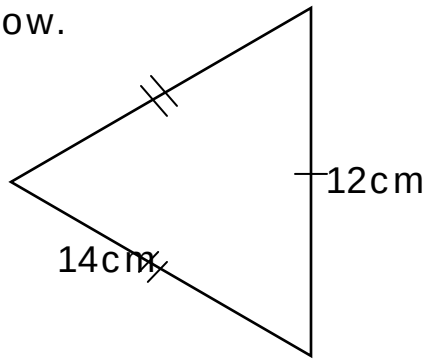
16. A mathematics test ended at 10:30 a.m. It lasted for $2\frac{1}{2}$ hours. At what time did it start?

17. Solve $2y + 4 = 22$

18. Subtract $4\,2\,4_{five}$

$-\ 1\,1\,2_{five}$

19. Find the perimeter of the figure below.



20. Write 249.68 in expanded form using exponents.

SECTION B (60 MARKS)

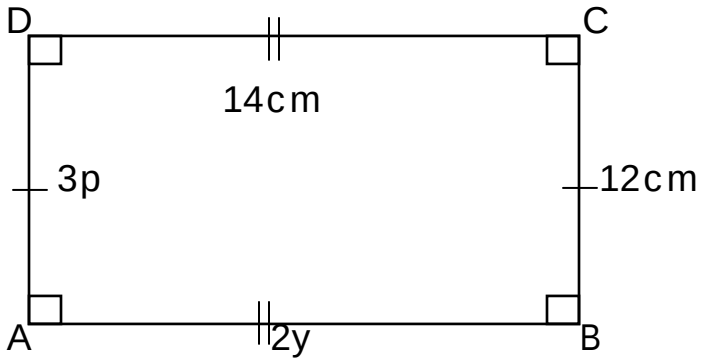
21. In a class of 140 pupils, $\frac{3}{7}$ of them are girls and rest are boys.

a) What is the fraction of boys in the class?**(2 marks)**

b) How many girls are in the class?**(2 marks)**

c) How many more boys than girls are in the class?**(2 marks)**

22. Study the figure below and use it to answer the following questions.



a) Find the value of; **(1mark each)**

i) p

ii) Y

b) Find the area of the figure ABCD above.**(2 marks)**

23. Thomas used digits 2 , 4 and 8 to form 3 – digit numbers.

a) Write down the largest and the smallest 3 – digit numbers that were formed using the above digits**.(2 marks)**

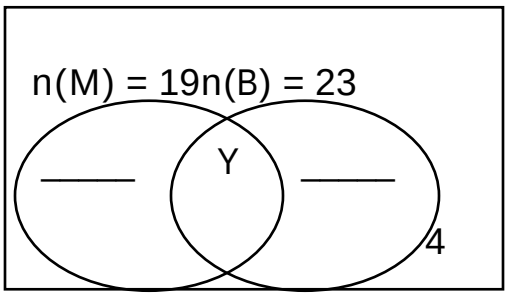
b) Round off the smallest number formed above to the nearest hundred.

(2 marks)

c) Express MMXLVIII in Hindu Arabic form.**(1 mark)**

24. In a farmers club of 36 farmers, 19 grow maize (m), 23 of them grow beans (B). Y farmers grow both maize and beans while 4 farmers don't grow any of the above crops.

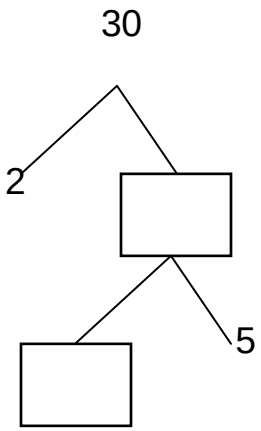
a) Use the above information to complete the Venn diagram.**(2 marks)**



b) How many farmers grow both maize and beans?**(2 marks)**

c) What is the probability of picking a farmer at random who grows only one type of crop?**(2 marks)**

25.a) Complete the diagram below.**(2 marks)**



b) Given that $F_{36} = \{2_1 , 2_2 , 3_1 , P\}$. Find the value of P.**(2 marks)**

26. Mark bought the following items from a supermarket.

2 kg of sugar at sh. 4000 per kg

$2\frac{1}{2}$ kg of rice at sh. 3000 per kg

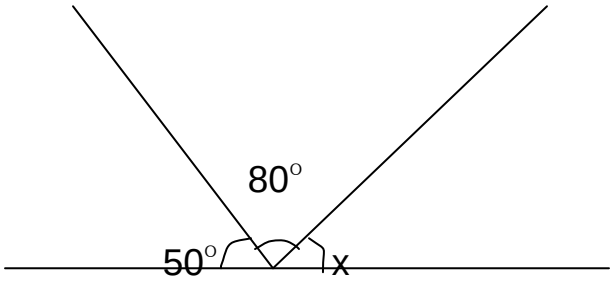
3 bars of soap at sh. 12000

a) What was his total expenditure?**(4 marks)**

b) If he remained with sh. 2500. How much did he have at first?**(2 marks)**

27.a) What is the complement of 28^{o}?**(2 marks)**

b) Find the value of x on the figure below.**(2 marks)**



28. Given that a = 3, b = 4 and c = 5. Find the value of;**(2 marks each)**

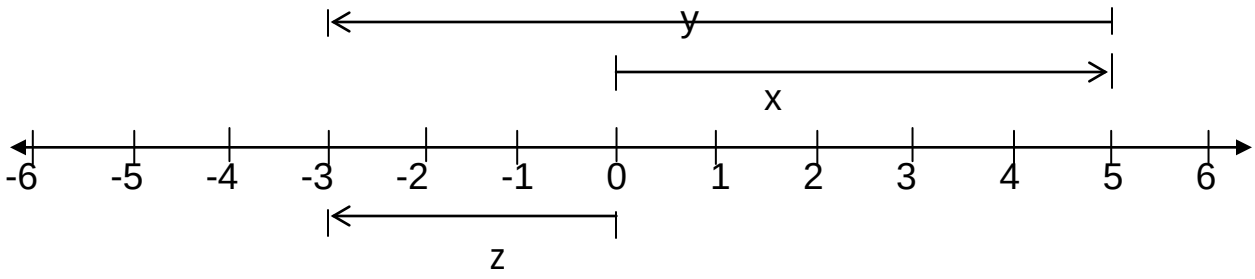
i) b + ca

ii) $\frac{a + c}{b}$

iii) 2b – c

29. Using a pair of compasses, a ruler and a pencil only. Construct a rectangle PQRS such that Length PQ = 6cm and width QR = 5cm.**(4 marks)**

30. Study the numberline below and use it to answer the following questions



a) Identify the integers represented by the arrows on the numberline above.**(3 marks)**

i) x = _____ ii) y = _____ iii) z = _____

b) Write down the mathematical statement shown on the numberline above**.(2 marks)**

31. A passenger train that travels from Tororo to Kampala charges adults sh. 12000 and children sh. 6000.

a) Tom and his wife with 2 children travelled from Tororo to Kampala by train. How much money did they pay altogether?**(3 marks)**

b) If Tom had sh. 60000 when starting the journey. How much money did he remain with after paying the fare for the whole family?**(2marks)**

32. A group of P.6 pupils scored marks in a mathematics tests as shown on the table below.

Derrick	John	Sam	Amos	Sarah
50	60	70	80	90

Represent the marks shown above on the bar graph. **(5 marks)**