SIR APOLLO KAGGWA / CITY PARENTS' SCHOOLS

P.7 HUB SET 4 TERM II 2023

MATHEMATICS

NAME: _____

STREAM:_____ **DATE:**_____

SCHOOL:_____

SECTION A (40 Marks)

1. Work out: **63 x 3**

2. Write **540,019** in words.

3. Given that **P = { square numbers less than 20}**. Find **n(P)**

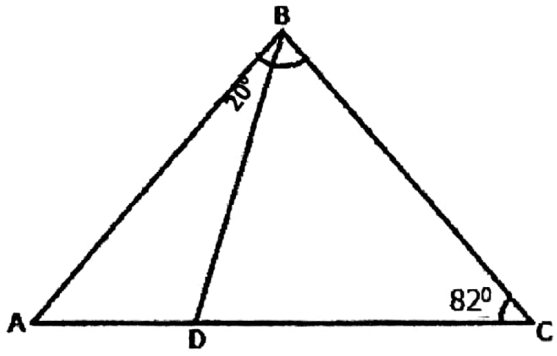
4. Work out: $\frac{2}{5}\ X\ 3\frac{1}{2}$

5. Find the next number in the sequence below;

   48, 47, 44, 38, 28, _____

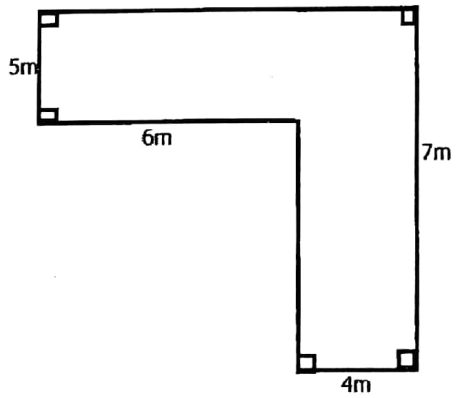
6. Simplify: $7xy - 3mn - xy - 5mn$

7. In the triangle **ABC**, angle **ABC = 50⁰** angle, angle **ACB = 82⁰**. Find the size of angle **ADB**.



8. A trader sold a pair of shoes at **sh. 25,200** making a profit of **sh. 1200**. What was his percentage profit?

9. The figure below represents Musoke's compound. Find the distance around the compound.



10. **Work out:** $3\,4\,4_{\text{five}}$

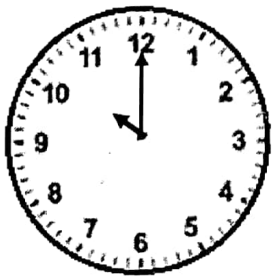
$+\ 3\,2_{\text{five}}$

11. Solve: $\frac{1}{5}p + p = 6$

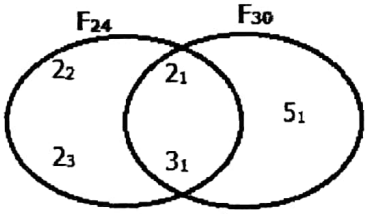
12. The mean of **6, 2m – 2, 9 , m+3** and **3m – 6** is **7**. Find the value of **m**.

13. If today is Tuesday, what day of the week was it **23** days ago?

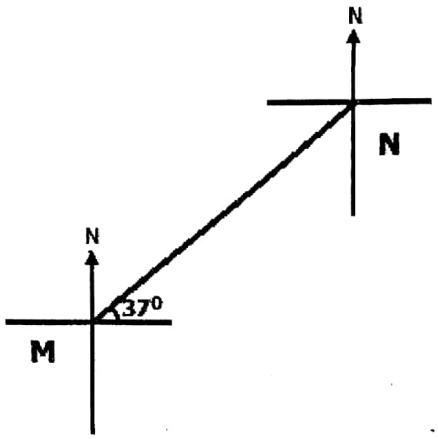
14. By the time Munene went to bed after his supper, his watch was reading as shown in the diagram below. Express the time he went to bed in 24 hour clock system.



15. Find the GCF of 24 and 30 using the Venn diagram below.



16. Find the direction of point **M** from point **N** in the diagram below.



17. Nulu deposited a bundle of five thousand shilling notes numbered consecutively from YP 823429 to YP 823538. How much money did she deposit?

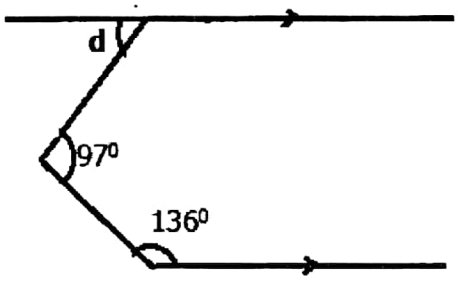
18. A basket contains **30** fruits. **15** are mangoes, **9** are oranges and the rest are apples. A fruit is picked at random from the basket. Find the probability that the fruit packed is an apple.

19. Solve: $\frac{P^4 \times P^3}{P^5}$

20. A car travels **120km** in **40** minutes, what is its speed in kilometres per hour.

SECTION B

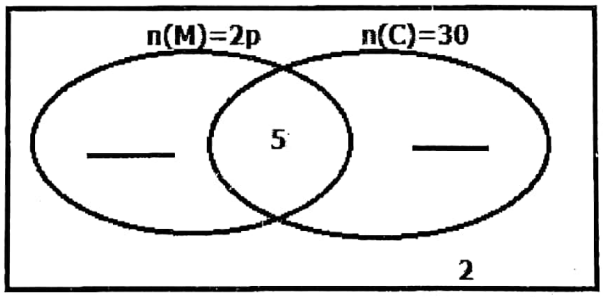
21. In the figure below, find the value of the angle marked **d**. (3marks)



b) The interior angle sum of a polygon is **1260⁰**. Find the size of each centre angle. (3marks)

22. At a birthday attended by **47** guests, **30** guests were served with **Chicken (C), 2p** were served with meat and **5** guests were served with both meat and chicken while **2** guests did not eat either of the two dishes.

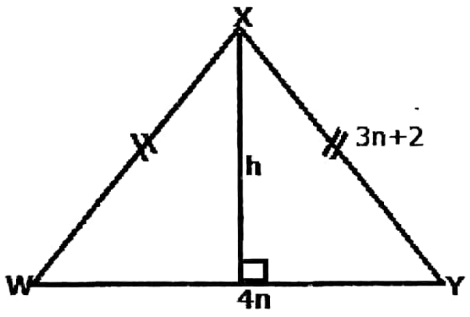
a) Use the given information to complete the Venn diagram below. (2marks)



b) How many guests ate only one type of dish? (3marks)

23. Ruth spent $\frac{1}{3}$ of her salary on food, $\frac{2}{5}$ on school fees, $\frac{3}{4}$ of the remainder on rent and saved the rest. If she saved sh. 15,000. How much did she pay for rent? (5marks)

24. In the figure below, **WX = XY = 20cm**.



a) Find the value of **n**. (2marks)

b) Find the area of triangle **WXY**. (3marks)

25. Using a ruler, a pencil and a pair of compasses only;

(i) Construct a parallelogram **ABCD** such that line **AB = 7.5cm**, **BC = 4.5cm** and angle **ABC = 135^0**.

(ii) Drop a perpendicular from **C** to meet **AB** at **k**.

(5marks)

b) Measure **CK**.....cm. (1mark)

26. A primary school has a population of **1015** pupils. Of these, $\frac{2}{5}$ are girls and $\frac{1}{3}$ of the boys are in the upper primary classes.

a) Find the number of boys in the upper primary classes. (2marks)

b) Express the number of boys in the upper primary classes as a percentage of the number of girls in the school. (2marks)

27. A motorist left town **M** at **10:50am** riding at a speed of **72km/hr** for 1hour and **30** minutes to town **T** where he had a break for **45 minutes** before continuing to town **Q** at a speed of **48km/hr** for **15** minutes. Find his average speed for the whole journey. (5marks)

28. The sum of **3** consecutive even numbers is 66. If the biggest number is **K**.

a) Find the value of **k** (3marks)

b) Find their range. (2marks)

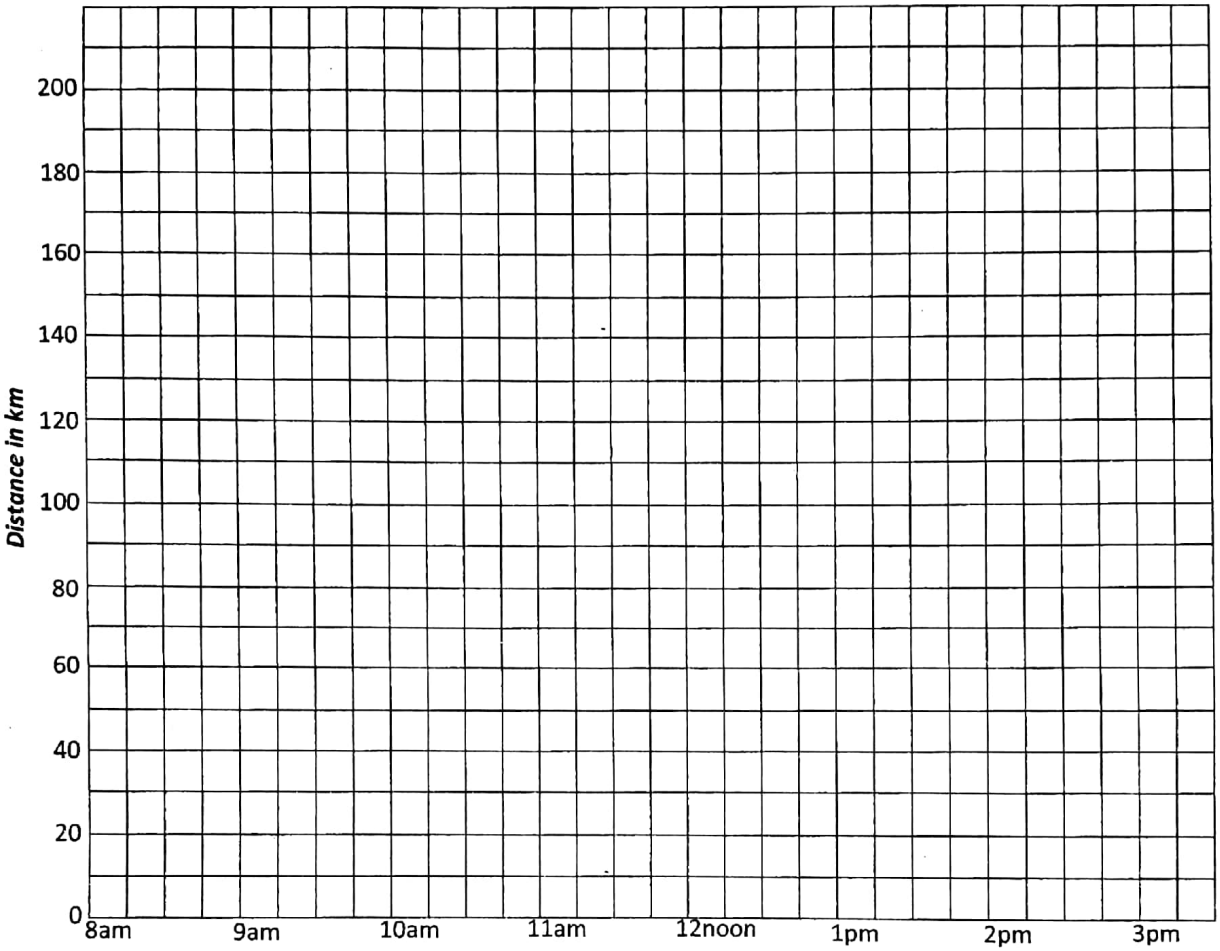
29. In the recent elections, Kamoga got **30%** more votes than Wamboka who got **2800** votes.

a) How many votes did Kamoga get? (3marks)

b) How many less votes did Wamboka get than Kamoga? (2marks)

30. A motorist left town **P** at **8:30am** and covered **60km** in **1 ½** hours to town **Q**. He rested for **½** hour before covering **100km** at a speed of **80km/hr** to town R. He had a break of **¼ hour** and covered the remaining distance to towns at a speed of **80km/hr** for **30** minutes.

a) Represent the motorist's journey on the graph below. (3marks)

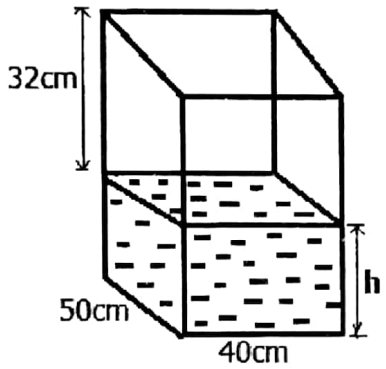


b) Calculate the motorist's average speed for the whole journey. (2marks)

31a) Solve for **m**: **$8 - 3(m+1) = 12$**. (2marks)

b) Kigongo is **4** times as old as Kato. Kato is **(n – 3)** years. If the difference between their age is **18**years, how old is Kigongo? (3marks)

32. The rectangular tank below is $\frac{3}{5}$ full of water.



a) Find the value of **h.** (3marks)

b) Calculate the capacity of the water in the tank. (2marks)

THE END