The Spectrum Examinations Hub

End of June Spot-Check 2025

P.6 MATHEMATICS

Time Allowed: 2 Hours 15 minutes

Name: _____stream_____

School_____

Read the following instructions carefully:

1. Do not write your **school** or **district name** anywhere on this paper.
2. This paper has two sections: **A** and **B**. Section **A** has **20 questions** and **section B** has **12 questions**. This paper has **12 pages** printed altogether.
3. Answer **all** questions. All the working for both sections **A** and **B** must be shown in the spaces provided.
4. **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.
5. **No calculators** are allowed in the examination room.
6. Unnecessary **changes** in your work and handwriting that cannot be easily read may lead to **loss of marks.**
7. Do not fill anything in the table indicated **"For Examiners' use only"** and the boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn. No.	**MKS**	**EXR'S No.**
1- 5		
6 -10		
11- 15		
16 – 20		
21 – 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
TOTAL		

Turn Over

SECTION A (40 MARKS)

*Answer **all** questions in this section.*

1. Workout: 4 2
   x 3
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2. Simplify: $7m - k + 3m - 2k$

3. Write 11,012 in words

4. Find the sum of the next two numbers in the sequence;

   1, 3, 6, 10, _____, _____

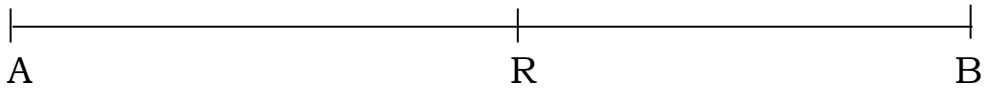
5. Given that $\boldsymbol{P}$ = {m, a, r, k, e, t} and $\boldsymbol{Q}$ = { b, a, s, k, e, t}
   Find n($\boldsymbol{P}$ U $\boldsymbol{Q}$)

6. Workout; $3 \div \frac{\mathbf{1}}{\mathbf{4}}$

7. Change 1.50 kg into grammes.

8. The cost of a half dozen of books is sh. 24,000. How much will Katrina's father pay for 4 similar books?

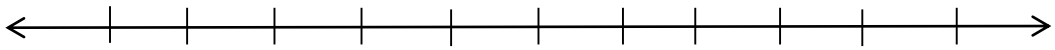
9. Using a pair of compasses and a ruler, construct a right angle at point R.



10. Given that p = 3 and q = -2. Find the value of $2p - q^3$

11. A mathematics lesson ended at 12:20pm. If the lesson lasted for 40 minutes, at what time did it start?

12. Round off 48 to the nearest tens using the number line below.



13. Solve for p: $\frac{2p}{3} - 4 = 6$

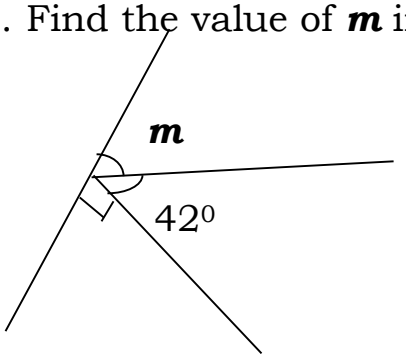
14. Convert 7:20 a.m. into the 24 hour clock system.

15. Given that  represents 10 pots. Draw pictures to represent 45 pots.

16. A conductor gave sh.2000 to the passenger and the passenger complained that the change was sh. 1000 less than the actual amount. If the passenger gave the conductor sh.5,000, how much was the bus fare?

17. In a box there are 4 red pens and 3 blue pens. Find the probability of picking a blue pen from the box at random.

18. Find the value of ***m*** in the figure below in degrees.



19. Find the largest number which can go into 12 and 18 and leaves no remainder.

20. A photo flame measures 30cm by 20cm. Calculate the length of the paper strip needed to wrap around the photo flame twice.

SECTION B (60MARKS)

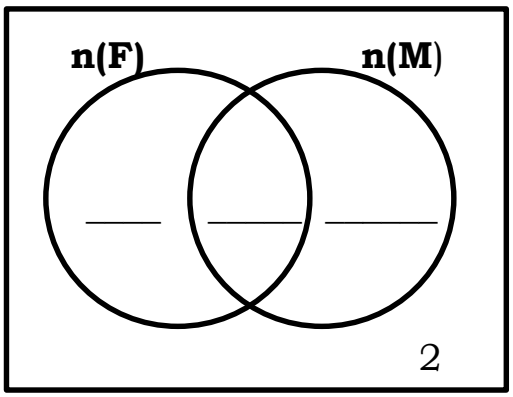
21. (a) Simplify: $\frac{2}{9} + \frac{1}{9}$ (2mks)

(b) Workout; $\frac{0.4 \times 0.36}{0.9 \times 0.2}$ (3mks)

22. The sum of three consecutive even numbers is 24. If the largest number is h;
(a) Find the smallest number. (4mks)

(b) Find their range. (1mk)

23. In a class of 25 pupils, w pupils enjoy fish only (F), 11 enjoy meat only (M), (w-4) enjoy both fish and meat while 2 pupils do not enjoy any of the two dishes.
(a) Use the above information to complete the venn diagram below. (3mks)



(b) If 12 pupils enjoy fish, how many pupils enjoy fish only? (2mks)

24. A shopkeeper bought a tray of 30 eggs at sh. 10,500. Three eggs got damaged and he sold the remaining eggs at sh. 500 each.
Calculate the total profit he made after selling all the eggs which remained.
(5 marks)

25. Liep went to the supermarket and bought the following items;
- 500gms of sugar at sh. 4500 per kg.
- 2kg of meat at sh. 18000@ kg.
- 2 ½ litres of milk at sh. 1,200 per litre.

(a) Calculate his total expenditure. (4mks)

(b) If he was given sh.8,750 as change, how much did he have at first? (2mks)

26. A driver moved from town **A** to town **B** at a speed of 60km/h for 2 hours. He rested at town **B** for 30minutes and continued to town **C** at a speed of 90km/h for 1 ½ hours.
(a) Calculate the distance from town **A** to town **B** (2mks)

(b) Calculate the average speed for the whole journey (3mks)

27. Okwa borrowed sh.100,000 from Arua SACCO which gave him an interest rate of 6% per year for 3 months.
(a) Calculate the simple interest he paid at the end of the 3 months. (3mks)

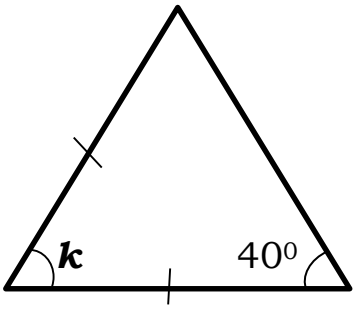
(b) How much amount did he pay back at the end of the 3 months? (2mks)

28. The cost of a pen is sh.200 more than the cost of a pencil. If Deng paid sh.800 for the two items;

(a) Calculate the cost of a pencil. (3mks)

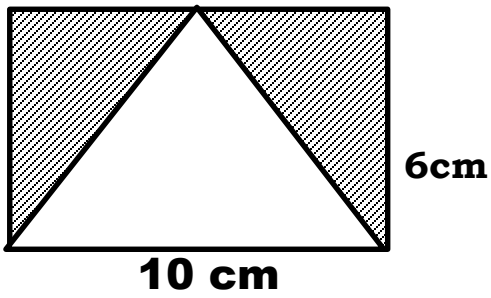
(b) How much can Rosette pay for 3 similar pens? (2mks)

29. (a) Find the value of angle marked ***k***. (2mks)



(b)Given that $(m+10^0)$ and 110^0 are supplementary angles. Find the value of ***m.***

30. Study the figure below and use it to answer the questions that follow.



(a) Find the area of the un-shaded shape. (2mks)

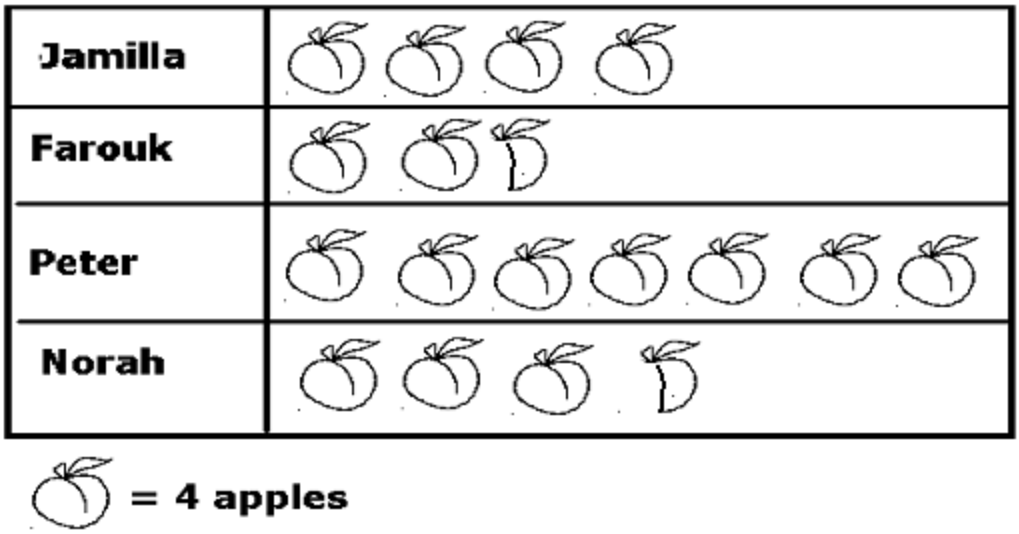
(b) Find the area of the shaded region. (3mks)

31. Using a pair of compasses and a ruler only;

(a) Construct a rectangle ***ABCD*** such that ***AB*** = 7cm and ***BC*** = 5cm. (4mks)

(b) Measure the diagonal ***BD*** = ……cm (1mk)

32. The pictograph below shows the number of apples got by each child. Use it to answer the questions that follow.



(a) How many apples did Farouk get? (2 marks)

(b) Find the total number of apples that were given out. (2 marks)

(c) What was the average number of apples given out? (2 marks)

END