



KAMPALA EDUCATIONAL CONSULTANCY (KEC)

TEACHERS' INTERVIEW

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Teacher's Name:

Teacher's signature:

Telephone No: DATE/...../.....

Previous School :

Read the following instructions carefully :

1. Do not forget to write your **school** or **district** on the paper
2. This paper has two sections: **A** and **B**.
Section **A** has **40** questions and section **B** has **15** questions.
3. Answer **all** questions. All answers to both Sections **A** and **B** must be written in the spaces provided.
4. All answers must be written using a **blue** Or **black** ball point pen or ink. Any work Written in pencil will not be marked.
5. Unnecessary changes in your work and handwriting that cannot be read easily may lead to loss of marks.
6. Do not fill anything in the table indicated
"FOR EXAMINER'S USE ONLY"

FOR EXAMINER' USE ONLY		
QN. NO.	NO. MARKS EXR'S	
1 -10		
11 - 20		
21 - 30		
31 - 40		
41 - 43		
44 - 46		
47 -		
50 - 52		
53 - 55		
TOTAL		

SECTION A: 40 MARKS

Questions 1 to 20 carry one mark each.

1. Work out the sum of 348 and 72.

2. The difference between $\frac{3}{4}$ and $\frac{2}{3}$ of a number is 6.
Find that number difference.

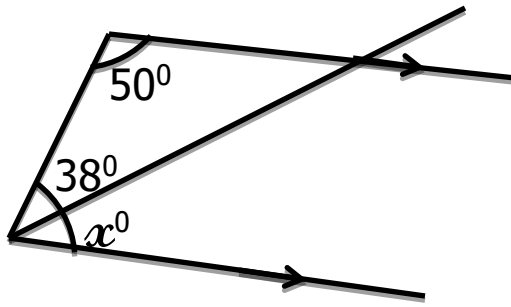
3. Write the next number in the sequence.

1 , 3 , 9 , 27 , 81 , _____ , _____

4. Find the average of 6 , 0 , $(2x + 6)$, $8x$ and 8

5. With the help of a ruler and a pair of compasses only , construct an angle
of 30°

6. Find the size of angle x and give reasons.



7. Solve : $10p = 10\frac{3}{16}$

8. Saudah bought a dress at Sh.6,000 and sold it at Sh.7200. What was her percentage profit?

9. Write 72 as a product of its prime factors.

10. A watch loses 5 seconds every one hour. How many minutes will it lose after 48hrs?

11. Write 24,086 in words.

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12. A tank contains 3000 litres of water . A tap is opened and releases water at a rate of 10 litres per minute. How long will it take for the tank to become empty completely?

13. Obua ran 100m in 10seconds . Express his speed in kilometers per hour.

14. Mukasa is three times as old as his son . The difference between their age is 36 years. How old is the son?

15. If the cost of buying 300 Kenya shillings is 6,000 Uganda Shillings , how many Kenya shillings can 42000 Uganda shillings buy?

16. Change 110_{two} to base ten.

17. Write MCMXLIV in Hindu – Arabic numerals.

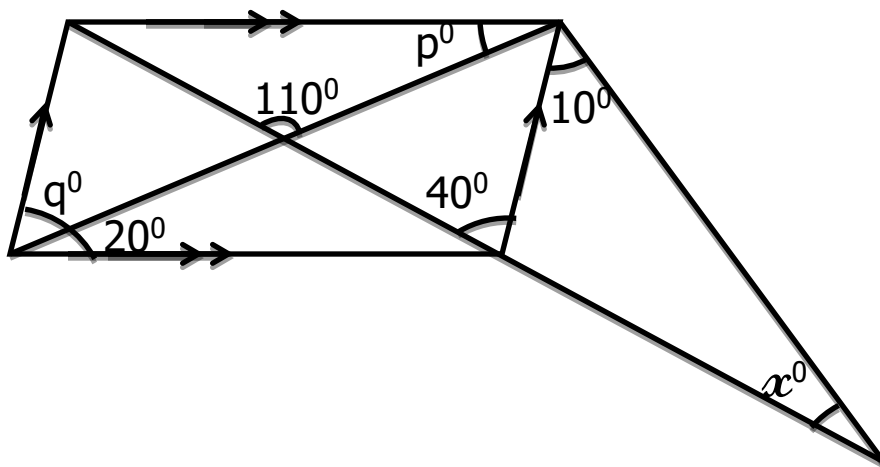
18. The bearing of K from L is 037° . Find the bearing of L from K.

19. 36 men working for 10 hours a day build a house in 75 days. How many men are required to build 4 similar houses in 60 days working for 8 hours?

20. Use lattice method to divide 5,247 by 9.

SECTION B.(60 MARKS)

21. Study the figure below.



a) Find the size of angle p , q and x .

i) p

ii) q

iii) x

22. Namusoke's mother bought 8 books at Sh. $(x - 1500)$ each and 2 mathematical sets at Sh. $(x + 1000)$ each . She spent Sh.53000 altogether. Find the amount of money spent on books.

23. At a party attended by 60 pupils , 42 ate chicken(C) , $K + 8$ ate meat only, k pupils ate both chicken and meat while 6 did not eat any of the two items .

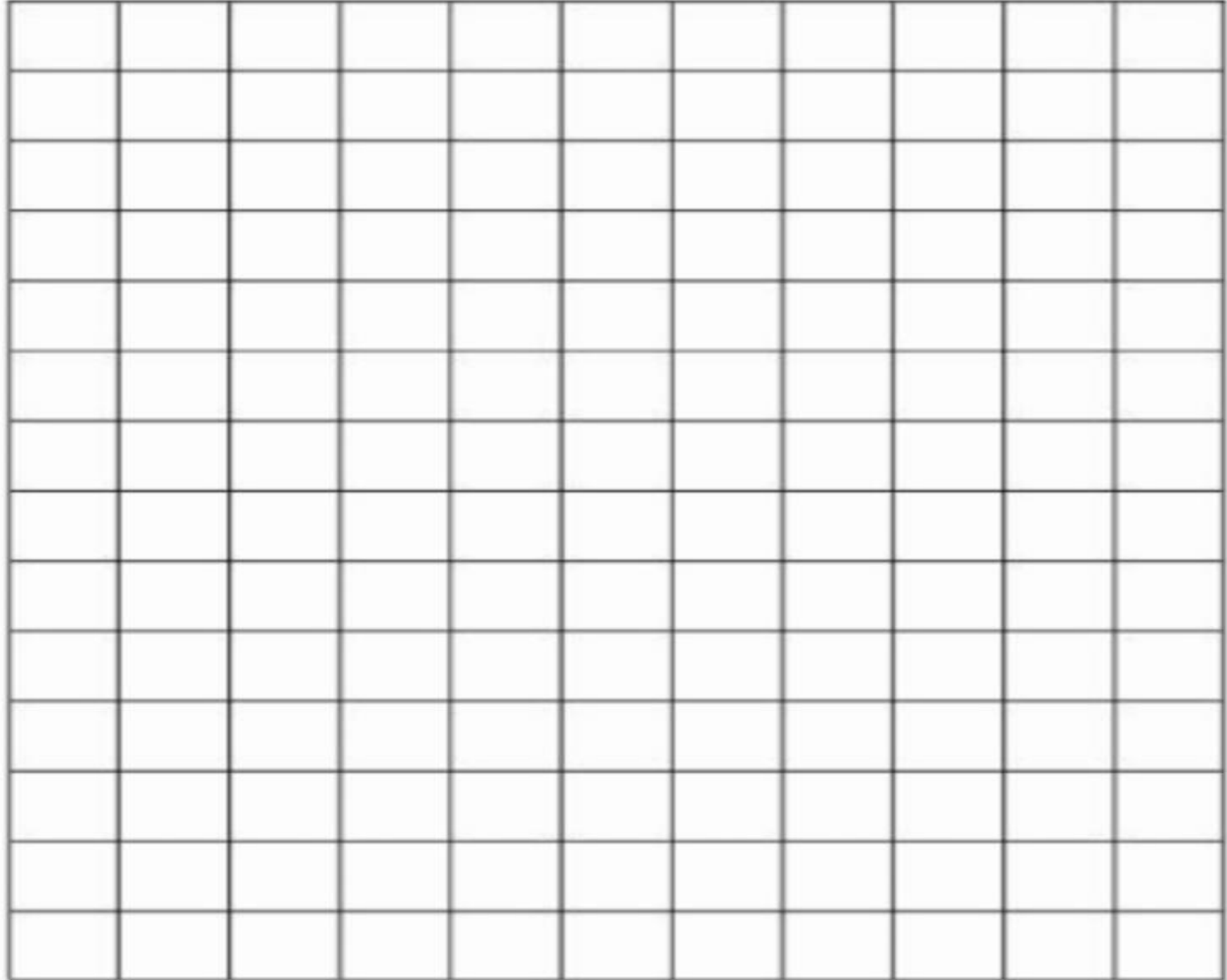
a) Draw a venn diagram to show the above information .

b) Find the value of k.

c) Find the probability of finding a pupil who ate meat.

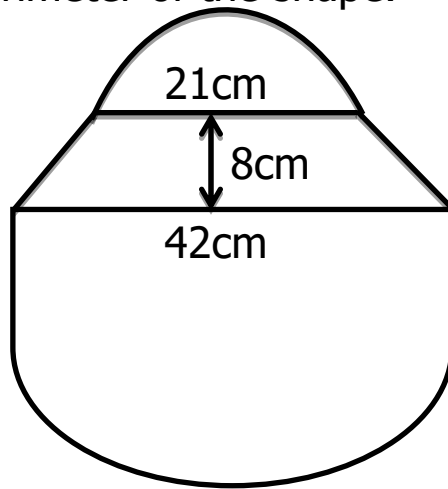
24. **A** and **B** are two towns 120km apart. A bus leaves Town A at 9:00am, travels for 2 hours at 40km/hr and then reaches town B at 1:00pm. It waits at B for 1 hour and returns to A travelling at a speed of 60km/hr.

a) Draw the journey of the bus.



b) Find the average speed of the bus while traveling for the whole journey.

25. Find the perimeter of the shape.



26. When the price of an article is reduced by 20% , the sales increase by 35%. Find the percentage change in total receipts.

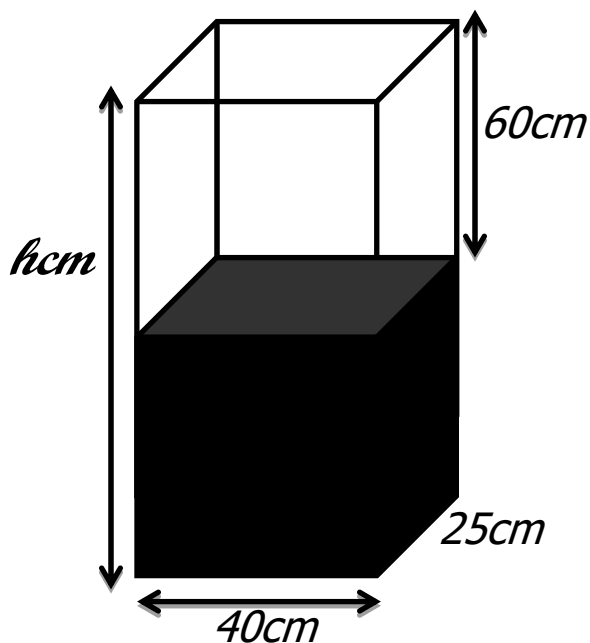
27. In an interview youv are awarded 7 marks for every correct answer and 3 marks are deducted for every wrong answer . A teacher has 13 questions correct and 7 questions wrong. What mark did he get?

28a) Using a pair of compasses , a pencil and a ruler only. Construct a triangle PQR in which $QR=6\text{cm}$ and point P lies on the perpendicular bisector of QR . Point P is 5cm above QR.

b) Measure PQ:

c) Measure angle PQR

29. Below is a rectangular tank filled with water such that it is $\frac{2}{5}$ full. Use it to answer question that follow.



a) Solve for h:

b) Find the volume of water in the tank.

c) How many litres of water does the tank above hold when completely full.

30. The district Inspector of schools in Gulu district registered 4,000 children for PLE 2023 out of these , 30% were girls below 15 years and 25% were boys below 15 years of age . If there were 1000 girls who were above 15 years of age.Find the number of girls who sat for PLE.

b) Find the number of boys who sat for PLE .

c) How many first grades did the district get if all the candidates below 15 years of age passed in division?

31. You are provided with the following.

1. Teacher's guide
2. Curriculum
3. Approved mathematics textbook.
4. Answer sheets

Prepare a detailed scheme of work about a topic of your wish for one week.

32. Using the same materials provided in no.31 prepare a lesson plan for 45 minutes about the topic you picked in 31 above. Carry out a demonstration of the topic you picked in front of the children.

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