

# KABOJJA JUNIOR SCHOOL

## PRE MOCK II EXAMINATION , 2019

### SET TWO

### Mathematics

Time: 2 hours 30 minutes

INDEX NUMBER

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Name: \_\_\_\_\_

Signature: \_\_\_\_\_

FOREXAMINER'S USE ONLY

School Name \_\_\_\_\_

District: \_\_\_\_\_

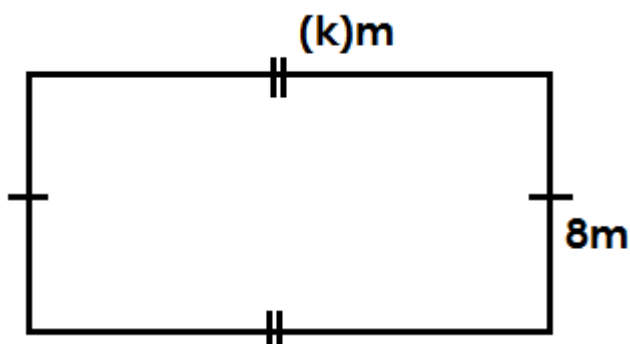
A	
B	
TOTAL	

Read the following instructions carefully:

1. This paper is made up of section A and B.
2. Section A has 20 short answer questions (40 marks).
3. Section B has 12 questions (60 marks).
4. All answers to both section A and B must be written in the spaces provided.
5. All answers must be written in blue ink and diagrams should be drawn in pencil.
6. Any handwriting that cannot easily be read will lead to loss of marks.
7. Unnecessary alteration of work may lead to loss of marks.
8. No calculators are allowed in the examination room.

## **SECTION A (40 Marks)**

1. Work out:  $48 \div 4$
2. Express XLIV in Hindu – Arabic numerals.
3. Simplify:  $5p - (-3 + p)$
4. Work out:  $2\frac{1}{4} - \frac{2}{3}$ .
5. Given that set  $R = \{ b, c, d, e, f \}$ , find the number of subsets in set R.
6. A trader withdrew a bundle of 5,000 shilling notes from a bank numbered consecutively from BT 8182010 to BT 8182199. How much money did the trader withdraw?
7. The figure below has a perimeter of 42m. Work out the value of k.



8. Find the next number in the sequence: 36, 34, 31, 26, 19, \_\_\_\_\_

9. Using a pair of compasses, a ruler and a pencil only, construct an angle of  $30^\circ$  in the space below.

10. Simplify:  $3^2 - 8$ .

11. A student left home in the morning to go to school at the time shown on the clock face below. If she took 45 minutes to reach school. Find her arrival time to school.



12. Find the mean of  $n$ ,  $3n - 5$  and  $2n - 7$ .

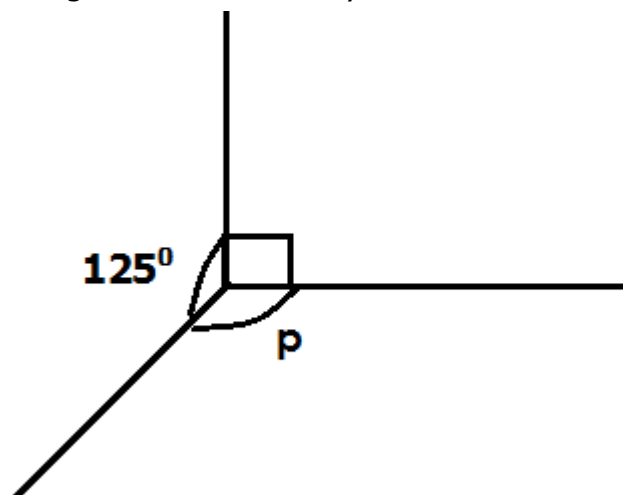
13. Work out:  $\frac{3^2 \times 3^4}{3^3}$ .

14. Write  $8\frac{1}{3}\%$  as a fraction in its simplest form.

15. Tea is sold in  $\frac{3}{4}$  kg packets. How many packets can be made from 24 kg of tea?

16. Simplify;  $\frac{y+6}{2} + \frac{y-2}{5}$

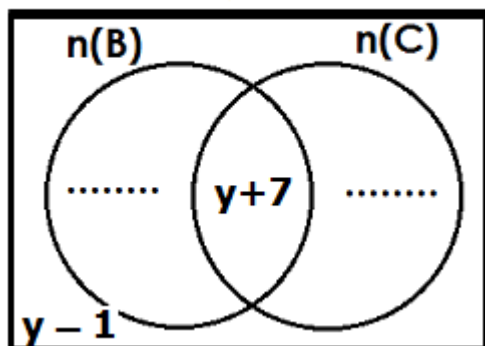
17. Study the diagram below carefully and use it to find the value of P in degrees.



18. Find the smallest number of pencils that can be shared by 24 pupils or 18 pupils leaving a remainder of 3 pencils in each case.
19. How long does a train moving at 48km/hr take to cover a distance of 36km?
20. If today is Monday, what day of the week will it be after 38 days?

### **Section B**

- 21(a) At a birthday party,  $2y$  guests ate Beef (B) only, 14 ate chicken (C) only,  $(y+7)$  guests ate both and  $(y-1)$  ate none of the two.
- (a) Complete the Venn diagram below.



- (b) Work out the value of  $y$  if 29 guests did not eat chicken. **(2 marks)**

(c) Find the number of guests who attended the party. **(2 marks)**

22(a) Work out  $1101_{\text{two}} + 110_{\text{two}}$ . **(2 marks)**

(b) If  $103_x = 28_{\text{ten}}$ , find the value of x. **(3 marks)**

23. A man spends 75% of his monthly salary and saves the rest. If he saves 180,000/-, find his salary. **(4 marks)**

24. Namutebi went to the market and bought the following items.

**3 bars of soap at sh. 3500 per bar.**

**2 ½ litres of milk at sh. 1500 per half litre.**

**250gms of sugar at sh. 4200 per kg.**

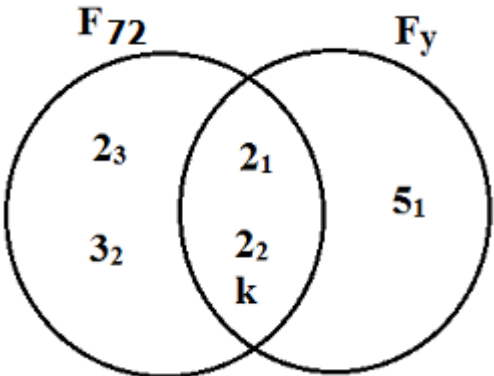
(a) How much money in total did she spend on the above items? **(4 marks)**

(b) If she went to the market with sh. 20,000, how much was her change? **(1 mark)**

25(a).Using a pair of compasses, a ruler, and pencil only, construct a triangle KLM where LM = 7cm, angle KLM = 60° and angle LMK = 45°. Drop a perpendicular at K to meet LM at P.  
**(5 marks)**

(b) Measure the length K P. **(1 mark)**

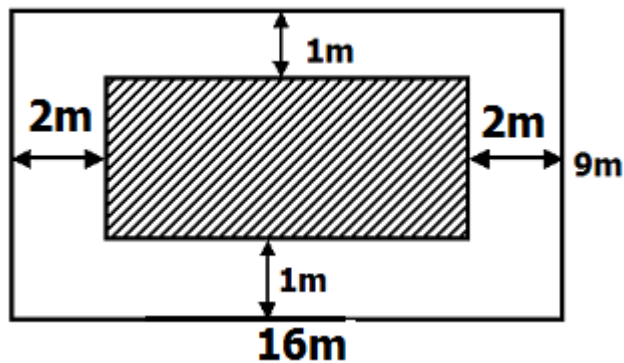
26. Study the Venn diagram below and use it to answer the questions that follow.



(a) Find the value of  $k$ . **(2 marks)**

(b) Calculate the LCM of 72 and  $y$ . **(2 marks)**

27. The diagram below shows a rectangular floor that is covered with a mat. The area covered with the mat is shaded. Find the area of the floor that is not covered with a mat. **(5 marks)**



28(a) Solve the inequality:  $-6 \leq -3(k - 2)$  **(3 marks)**



(b) Find the solution set for the above inequality.

**(1 mark)**

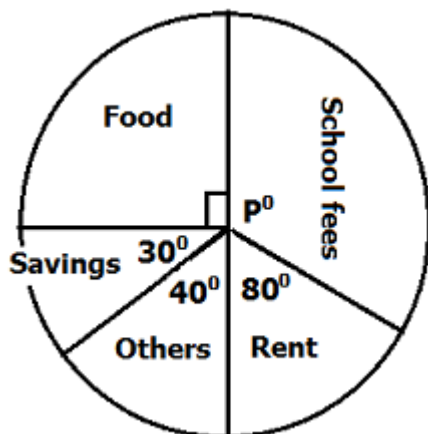
29. In a basket,  $\frac{5}{8}$  of the apples are red,  $\frac{1}{6}$  are yellow and the rest are green.

(a) Find the fraction of the green apples in the basket.

**(3 marks)**

(b) If there are 60 green apples in the basket, how many apples are in the basket altogether?  
**(2 marks)**

30. The pie-chart below shows how Adong spends her salary. Use it to answer the questions that follow.



(a) If she spends sh. 240,000 on school fees, what is her salary? **(4 marks)**

(b) What percentage of her salary does she save? **(2 marks)**

31. A motorist left town A at 9:15am driving at 80km/hr and reached town B at 11:45 am.

(a) Find the time taken from town A to town B. **(1 mark)**

(b) How far is town B from town A? **(2 marks)**

(c) If his car uses 3 litres of fuel for every 40km. find the number of litres of fuel needed for the whole journey. **(2 marks)**

32. The length of a road leading to Kololo Junior school is 1.8 km. Poles were fixed in straight lines on both sides of the road at intervals of 20 metres.

(a) How many poles were used altogether? **(3 marks)**

- (b) If the cost of each pole was sh. 3,000, how much money did the school spend on the poles altogether? **(2 marks)**

END