KAMPALA JUNIOR ACADEMY

LOWER WORK TEST 1 2020

PRIMARY SEVEN

MATHEMATICS

Time allowed: 2 hours 30 minutes

Index No. | | | | | | | | | |

Candidate's Name: _____

Candidate's Signature: _____

Read the following instructions carefully:

1. The paper has **two** sections: **A** and **B**

2. Section **A** has 20 short questions (40 marks)

3. Section **B** has 12 questions (60 marks)

4. Answer **ALL** questions. All answers to both Sections A and B must be written in the spaces provided.

5. All answers must be written using a blue or black ball point pen or ink. Diagrams should be drawn in pencil.

6. Unnecessary alteration of work may lead to loss of marks.

7. Any handwriting that cannot be easily read may lead to loss of marks.

8. Do **not** fill anything in the boxes indicated for Examiner's use only.

FOR EXAMINER'S USE ONLY

FOR EXAMINER'S USE ONLY		
Qn. No	**MARK**	**SIGN**
1 – 10		
11 – 20		
21 – 30		
31 – 32		
TOTAL		

SECTION A: (40 MARKS)

1. Subtract:
$$\begin{array}{r} 9\ \ 9 \\ -\ 8\ \ 6 \\ \hline \end{array}$$

2. Write XIX in Hindu Arabic.

3. Add: $\frac{2}{3} + \frac{3}{4}$

4. Express 50cm in metres.

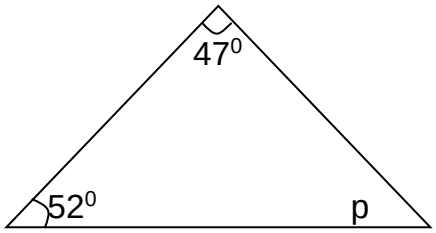
5. Simplify: $3a - 4a + 7a$

6. Find the square root of $1\frac{7}{9}$

7. A trader sold a radio at Sh. 125,000 and made a profit of Sh. 9000. How much did he buy the radio?

8. Find the greatest common factor of 12 and 18.

9. Calculate the value of angle p in the figure below.



10. The cost of 3 books is sh. 27000. How many books would one buy with sh. 45000?

11. Add: 1011_{two} + 111_{two}

12. Solve: $3y + 5 = 20$

13. Shade $\frac{3}{4}$ of the given figure.

14. A milk man has 12 litres of milk. He packs the milk in half litre sachets. How many half litre sachets did he get?

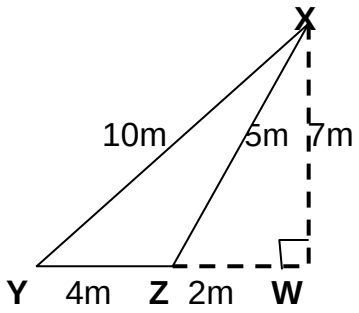
15. Work out: $4 - 5 = \pmod 7$

16. Find the product of 321 and 23.

17. Express 3.30p.m in a 24 hour clock.

18. Find the prime factorization of 36. (answer in set notation)

19. Calculate the area of triangle **XYZ** in the figure below.



20. If set **N** = {1, 2, 3} Using listing method, find the number of subsets that can be got from set **N**.

SECTION B: (60 MARKS)

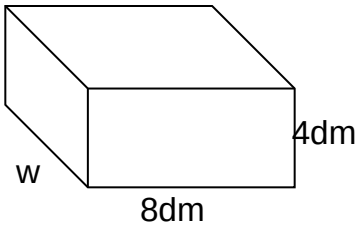
21. In a class of 72 children, $\frac{2}{3}$ of them like sports and the rest like music.

(a) How many children like sports? *(2 marks)*

(b) What fraction like music? *(2 marks)*

(c) How many more pupils like sports than music? *(2 marks)*

22. (a) The volume of the figure below is 160 cu.dm. Calculate its width. *(3 marks)*



(b) Find its total surface area. *(3 marks)*

(c) How many vertices does it have? *(1 mark)*

23. Miiro scored the following marks in a test.
50, 60, 55, 50, 80

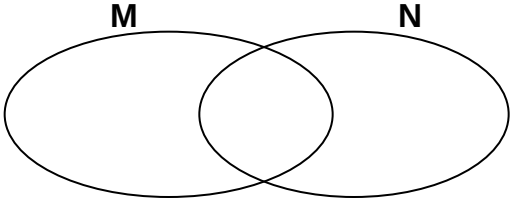
(a) Find his mode mark. *(2 marks)*

(b) Work out his mean mark. *(2 marks)*

(c) What was his median mark? *(2 marks)*

24. Given that set **M** = {the first five alphabetic letters} and set **N** = {vowels}

(a) Show this information on the venn diagram below. *(3 marks)*



(b) Find **M**$\cap$**N** *(1 mark)*

(c) Find **N** – **M** *(1 mark)*

25 (a) Draw a regular triangle in a circle with a radius of 4cm.

(4 marks)

(b) What special name is given to this triangle? *(1 mark)*

26. (a) Musoke drove a car at a speed of 60km per hour for 2 hours. What distance did he cover? *(2 marks)*

(b) How long would he take to cover 80km? *(2 marks)*

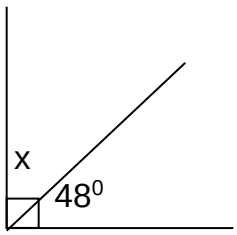
27 Lukia went shopping with Sh. 50000 note and bought the following:-
2kg of rice at sh. 2800 @ kg
4 bars of soap at sh. 2500 each.
5kg of salt at sh. 3000
1 ½ kg of maize flour at sh. 1600 per kg.

(a) Calculate her bill. *(4 marks)*

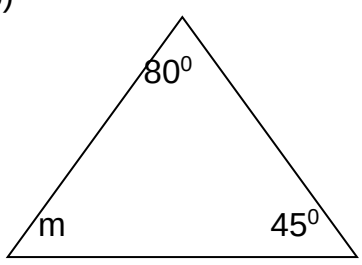
(b) What change did she get? *(2 marks)*

28. Find the value of unknown angles. *(2 marks each)*

(a)



(b)



29. Juma used his land as follows:-

¼ for growing crops.

$\frac{1}{3}$ for grazing goats

$\frac{1}{6}$ for a house and compound and the rest for rearing birds.

Use the accurate circle below to draw a pie chart showing the above information without using degrees. *(4 marks)*

30 Complete the statements using **>**, **<** or **=** *(1 mark each)*

(a) 3 + 2 _____ 2 x 3

(b) 72 ÷ 6 _____ 5 + 7

(c) 104^0 _____ 104 x 0

(d) 1kg of stones _____ 1000 gm of cotton

31. (a) Arrange the following in descending order.

$\frac{2}{3}, \frac{7}{12}, \frac{1}{2}, \frac{3}{4}, \frac{5}{6}$ *(3 marks)*

(b) Simplify: $\frac{1}{3} - \frac{1}{2} + \frac{1}{4}$ *(2 marks)*

32. Work out: *(2 marks each)*

(a)

Wks	**Days**
5	2
- 3	6

(b)

Hr	**Min**
3	48
+4	52

Good Luck