**COMPETENCE BASED CURRICULUM**

Kenya Junior Secondary Education Assessment

FORMATIVE ASSESSMENT

TIME

2 HRS

ENDTERM 1

**MATHEMATICS**

G8

2024

**SCHOOL:** ……….……………………………………………………..……

**NAME:** ……………….…………………..………………………...………..

**SIGNATURE: ………………ASSESSMENT NO…………………………..**

***RUBRICS (for official use)***

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| --- | --- | --- | --- | --- |
| **MARK SCORE RANGE** | ***Below 40*** | ***40-59*** | ***60-79*** | ***80-100*** |
| **PERFORMANCE LEVEL** | *Below expectation* | *Approaching expectations* | *Meeting expectations* | *Exceeding expectations* |
|  |  |  |  |  |

|  |  |
| --- | --- |
| **OUT OF** | **100%** |
| **LEARNERS SCORE** |  |
| **PERCENTAGE SCORE** |  |
| **PERFORMANCE LEVEL** |  |

**FOR FACILITATOR’S USE ONLY**

**Answer all Questions**

**Show your working in this paper.**

1. Use the symbols <,>, or = to compare the following integers.

Example: -13 and 17 (1mk)

ANSWER -13 < 17

1. -2 and -3 (1mk)
2. -3 and 4 (1mk)
3. 5 and -5 (1mk)
4. Find the L.C.M of 24, 15 and 16. (2mks)
5. Circle the numbers which are:
6. Odd numbers only [ 20, 18, 6, 7, 8, 21 ] (1mk)
7. Prime numbers only[ 14, 2, 10, 9 ,3 ] (1mk)
8. Convert the following fractions into percentages:
9.  (2mks)
10.  (2mks)
11. What is the G.C.D of 60, 80 and 120? (2mks)
12. What is the total value of digit 7 in the number 13,467,589? (1 mk)
13. Write in figures fifty five million five thousand and five. (2mks)
14. Write the following into improper fraction:
15. 1 (2mks)
16. 2 (2mks)
17. Write 27,707,807 in words. (2mks)
18. State the place values of the following digits in the number 201.789.
19. 1 (1mk)
20. 8 (1mk)
21. Use factor-tree to decompose 256 into prime factors. (3mks)
22. Use a number line to perform the following operations.
23. (-10)-(-3) (1mk)
24. (-3)-(-4) (1mk)
25. (+1)-(-8) (1mk)

13. What is the place value of total value of digit 6 underlined below.. (3mks) 47,397,263,402

1. Round off the following numbers to the nearest number indicated in the brackets.

(3mks)

a) 473,678(100)

b) 379(10)

c) 38,679(10,000)

1. Write the following in symbols. (2mks)
   1. Five billion, five million, five thousand and five.
2. Write the following in words 80,000,045, 000
   1. (2mks)
3. Express the following numbers as a product of their prime factors.

a) 900 (2mks)

b) 300 (2mks)

1. 196 (2mks
2. 64 (2mks)
3. Use the number line to perform the following.

a) (+5) – (-2) (2mks)

b) (+2) + (+3) (2mks)

c) -7- (-8) (2mks)

1. The G.C.D of two numbers is 12 and their L.C.M is 240. If one of the numbers is 60. Find the other number. (3mks)
2. If x=-2, 7=-6 and Z=4. Find the values of
3. 4xy (3mks)

z

1. 4z+2y-x (3mks)
2. Three tanks are capable of holding 36, 84 and 90 Litres of milk. Determine the capacity of the greatest vessel which can be used to fill each one of them on exact number of times. (3mks)
3. Tell whether the following numbers are divisible by 3. (4mks) a) 1257

b) 7203

1. Three bells ring at intervals of 40 minutes, 45 minutes and 60 minutes. If they ring simultaneous at

6.30 a.m. at what time will they next ring together. (4mks)

1. A bookstore had 30816 exercise books which were packed in cartons. Each carton contained 24 exercise books. The mass of an empty carton was 2kg and a full carton 12kg.
   1. How many cartons were there?

(2mks)

* 1. What was the total mass of the empty cartons?

(2mks)

* 1. What was the total mass of books alone? (2mks)

1. Name the following fractions.(3 mks)

2/3

5/8

9/10

1. Express as a fraction. (3mks)
2. The diagonal of a square measures 44cm.Calculate the perimeter of the square. 3mrks
3. Calculate; [3mks]

2.61 x 21.83 x 0.073

61.72 x 11.73

1. Patrick spent 2/5 of his salary on food, 1/3 of the remainder on electricity and saved the rest.

(a). What fraction of his salary did he save? (2mrks).

(b). If he spent Sh. 1,200 on food, how much did he spend on electricity? (2Mks)

1. If r=5, s=2, and t=3, find the value of; (3mks)

1. A farmer has three containers of capacity 12L, 15L and 21L, calculate the capacity of:
2. The smallest container which can be filled by each one of them an exact number of times (2 Mrks).

(b). The largest container which can fill each one of them an exact number of time.(2 Mks)