

**P1 – Y2
MATHEMATICS
MOCK EXAM – PP2
MARCH 2019
TIME: 1½ HOURS**

NAME:.....

INDEX NUMBER:.....

ADM NO: HALL:

INSTRUCTIONS TO CANDIDATES.

- 1) Write your Name, Index number, Adm No. and your hall in the spaces provided above.
- 2) Answer all the questions in this paper
- 3) All the working must be shown

**SECTION A – (60 MARKS)
Answer all the questions in this Section.**

1. Describe the steps the teacher would follow to lead learners to find the solution of the inequality $4x > 2(x + 3)$. **3mks**
2. State the errors the pupils make when measuring angle with a protractor. **3mks**
3. A pupil worked out the following problem as follows.
 $43 - 29 = 21$
 - a. State the errors the pupil made. **1mk**
 - b. What would you emphasize in your remedial to assist the learner. **2mks**
4. List the steps you would follow to find the square root of 2116 using averaging method.
(Use 43 as estimated square root) **4mks**
5. Explain how you would use abacus to teach $44 - 17$ **4mks**
6. Describe an activity to show that $24 \div 3 = 8$ using repeated subtraction. **3mks**
7. Describe how you would assist a learner to solve for the value of 'a' in the following equation. **3mks**

$$\frac{3a-7}{4} = 7 - a$$

8. State two common errors learners make when working the following problems. **2mks**
 $2\frac{3}{4} - 1\frac{1}{3} + 2\frac{1}{2} \div 7\frac{1}{2}$
9. Explain how a teacher would guide the pupil to find next two numbers in the following sequence
4, 6, 10, 16, _____, _____ **3mks**
10. A teacher showed her class how to work out the problem below,
"If 8 shirts cost Kshs.3,200. Find the cost of 12 shirts". Show the chalk board layout the teacher would use. **2mks**

11. Explain how you would guide the pupils to round off the number 53746 to the nearest hundred. **3mks**
12. List the steps you would follow to introduce the lowest common multiple (LCM) of number 4, 8, and 12. **4mks**
13. Describe how a teacher should leader the learners to collect and organize data about different types of vehicles passing through the road near the school. **3mks**
14. Describe the steps a teacher would follow to lead learners to find the solution of the inequality $4x + 7 < x + 15$ **3mks**
15. A teacher set the following questions in a test:

At a party $\frac{2}{3}$ of the children ate chapati, $\frac{1}{4}$ of the remainder ate ugali while the rest ate viazi. If those who ate viazi were 24, how many children had attended the party?

Explain how the teacher should lead the learners to answer the question. **4mk**

16. Explain how a teacher would develop the concept of 0.01 to the class. **3mks**
17. A teacher prepared the following question for the class;

On a certain day, a total of 10 pupils were absent from class. During that day, $\frac{1}{3}$ of the girls were absent. If 12 girls were present, how many boys were absent?

Explain the steps involved in working out the question. **3mks**

18. A teacher prepared the following questions for a test:
The area of a squire is 196cm^2 . What is the length of one side of the square in cm?

A pupil gave the answer as 49cm. what would the teacher emphasize on in the remedial work so that the pupil works out such a question correctly? **3mks**

19. Describe a practical activity a teacher would use to lead learners work out speed in meters per second (m/s). **3mks**
20. A teacher prepared the following questions for a class.
A salesman earned a basic salary of Kshs.8,000 per month. For any sales above Kshs.100,000 he was paid a commission. In a certain month, he earned a total of Kshs.40,500 for selling items worth Kshs.750,000. What was the percentage commission?
Explain the steps the teacher would follow to lead the class work out the question. **3mks**

SECTION B (40 MARKS)

Answer any FOUR questions in this section.

21. You are preparing to teach the subtopic “Basic addition facts” to your class.
- State any two activities on addition a teacher would involve the learners in before introduction of basic addition facts. **2mks**
 - Describe how you would teach that $5 + 8 = 13$ **2mks**
 - Write down a word problem that you would give to your learners during application and evaluation stage. **2mks**
 - A teacher intends to teach subtraction of the whole numbers. List the stages of development in teaching subtraction in correct order and give an example in each. **4mks**

22. A teacher intended to introduce a decilitre to the class.
- What relevant previous knowledge should the pupils have? **4mks**
 - Name teaching/learning resources the teacher would use. **2mks**
 - Describe practical activities the teacher would involve the pupils in such that the pupils recognize and identify a decilitre. **2mks**
23. A teacher intends to introduce subtraction of fractions such as $\frac{3}{4} - \frac{2}{5}$.
- State the objective of the lesson. **1mk**
 - Giving an example in each case, state prior knowledge involving subtraction of fractions that that pupils would be expected to have. **4mks**
 - Using the example $\frac{3}{4} - \frac{2}{5}$, describe the steps that the teacher should follow to guide learners to work out the subtraction. **4mks**
 - State the error that pupils are likely to make when subtracting such fractions. **1mk**
24. You intend to make a lesson plan to introduce inverse proportion to your class.
- State the objective of the lesson **1mk**
 - The previous knowledge the learners should have had is on direct proportion. Explain using an example, the term direct proportion. **3mks**
 - Using an example, describe how you would lead learners to achieve the objective. **3mks**
 - What conclusion in reference to inverse proportion would you expect learners to acquire. **1mk**
 - Set a question involving inverse proportion that you would use to lead learners master inverse proportion. **2mks**
25. A teacher planned to teach “construction of an angle of 75°” to a class.
- State the objective of the lesson. **1mk**
 - Name two teaching /learning aids for the lesson. **4mks**
 - State the previous knowledge the learners should have prior to the lesson. **3mks**
 - Through construction of an angle of 75°, explain how the teacher would lead the class to construct the angle. **5mks**