Province of the
EASTERN CAPE
EDUCATION

CHRIS HANI EAST DISTRICT

GRADE 10

MARCH 2024

MATHEMATICAL LITERACY
CONTROLLED TEST

Marks : 50

Time : 1 hour

This question paper consists of 4 pages including the cover page

INTRUCTION AND INFORMATION

Read the following instructions carefully before answering the questions

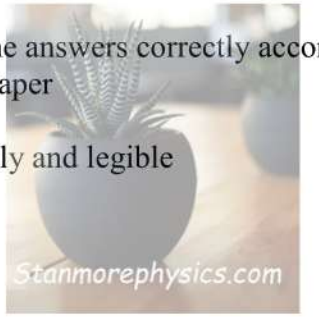
1. This question paper consists of 3 questions. Answer all the questions

2. Clearly show ALL the calculations, diagrams, graphs etc that you have used in determining the answers

3. If necessary, round off answers to TWO decimal places, unless stated otherwise.

4. Number the answers correctly according to the numbering system used in the question paper

5. Write neatly and legible



QUESTION 1

1.1 Determine the value of the following

1.1.1 $3 + \sqrt{12 - 3}$ (2)

1.1.2 $3 + 15 \div 3$ (2)

1.1.3 $3(20 - 18)^2$ (2)

1.2 Round off the following to:

1.2.1 3,74 (1 decimal places) (2)

1.2.2 47,657 (2 decimal places) (2)

1.2.3 59,6 (the nearest units) (2)

1.3 Write 0,1579 million as a number (2)

(14)

QUESTION 2

2.1 The Chris Hani East district has 65 teachers who are teaching Mathematical literacy in grade 10. The Subject Educational Specialist organised a workshop for these teachers, only 55 teachers attended the workshop.

2.1.1 Write the ratio of teachers who did not attend the workshop to the ratio of teachers who are teaching mathematical literacy in grade 10 in the district in a simplified form (3)

2.1.2 Calculate the percentage of teachers who did not attend the workshop (3)

2.2 Ovayo, Endinako, and Njongo have recently started their new business as partners, they contributed a total of R45 000 as their capital. Their individual contributions are as follow

Ovayo : R20 000
Endinako : R15 000
Njongo : R 10 000

They agreed that they are going to share the profit according to their capital contribution.

2.2.1 Calculate how much each will get if they make a profit of R100 000 (6)

2.2.2 Calculate Endinako's contribution as a percentage of their total contribution. (3)

(15)

QUESTION 3

3.1 Zwelitsha Secondary School wants to hire a bus to transport learners to a sport event. The total number of learners that will be transported is 60. The school sports organizer received two quotations from different companies.

Company A : charges R150 per learner

Company B : charges R40 per km

The school governing body (SGB) offered to give the learners an amount of R6 450 for food.

Use the information above to answer the questions that follow.

3.1.1 Write the amount the School Governing Body will give in words (2)

3.1.2 Construct the cost formula for company A (2)

3.2 Below is the table that shows the cost of the bus per km when using company B

Number of km	10	20	**A**	30	**C**
Cost of bus®	400	800	1000	**B**	2000

Use the table above to answer the questions that follow

3.2.1 Identify the independent and dependent variable (2)

3.2.2 Calculate the values **A, B,** and **C** (6)

3.2.3 One learner stated that the cost of 20 learners in company A would be the same as the cost of 75km in company B. Verify showing calculations if the learner`s statement is valid (4)

3.2.4 Show by means of calculations which company will be the cheapest if the total distance of their return trip is 200km (5)

(21)

T0TAL **[50]**