



Province of the  
**EASTERN CAPE**  
EDUCATION

**NATIONAL  
SENIOR CERTIFICATE**

**MATHEMATICAL LITERACY**

**GRADE 10**

**CONTROLLED TEST**

**MARCH 2024**

MARKS: 50

TIME: 1H:30

**QUESTION 1**

Umtata high school wants to hire a bus to transport learners to a sport event. The total distance of their return trip is 200km. The school sports organizer received two quotations from different companies.

Company A: Charges R150 per learner  
Company B: Charges R40 per kilometer

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

1. Use the information above to answer the questions that follow.

1.1.1 Write the amount the school governing body will give for food in words (2)

1.1.2 Determine the cost formula for company A (2)

1.1.3 Determine the cost formula for company B (2)

1.2. Below is the table that shows the cost of the bus per learner when using company A

TABLE1: COST OF COMPANY A BUS

NUMBER OF LEARNERS	10	20	A	30	C
COST OF BUS	1500	3000	3750	B	9000

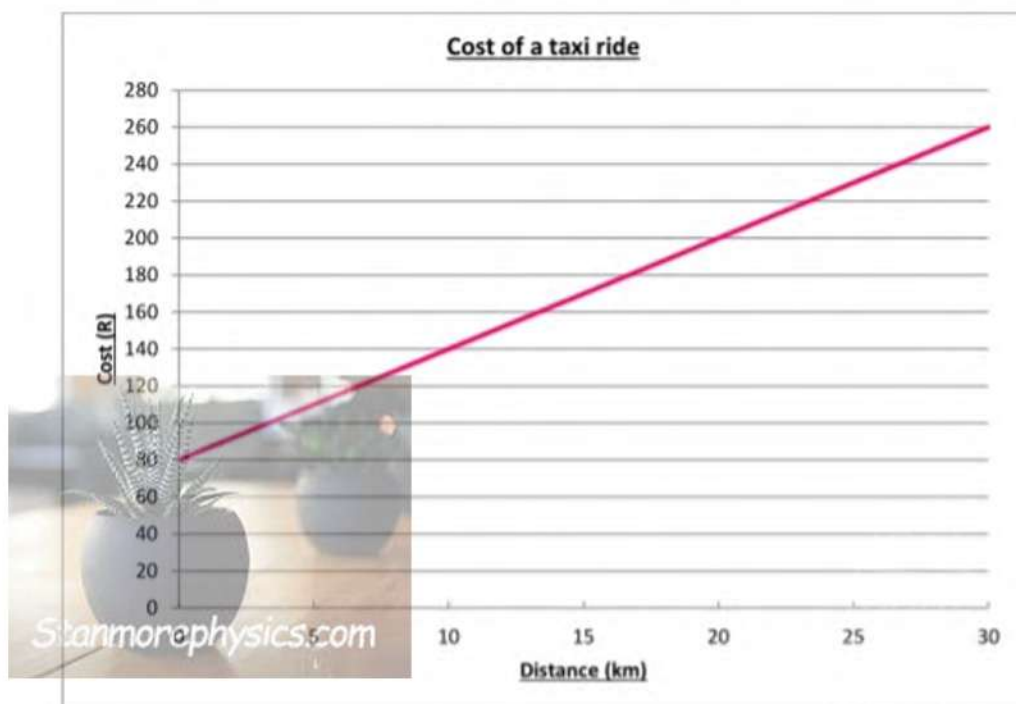
- 1.2.1 Calculate the values A,B and C (6)
- 1.2.2 Write the ratios of company A's number of learners to the cost of the bus for 10 learners in simplest form (2)
- 1.2.3 Identify the dependent and independent variables in the table above (2)
- 1.2.4 Show by calculations which company will be the cheapest if the school trip will have 60 children. (4)

[20 marks]



## QUESTION 2

2. Study the graph and answer the questions that follow.



- 2.1 which proportion is shown by the graph? (2)
- 2.2 how much does the taxi company charge for renting the taxi (fixed fee)? (2)
- 2.3 How much does a company charge for a 20km trip? (2)
- 2.4 how many kilometers can one travel at a cost of R140? (2)
- 2.5 What is the price per 5 km without a fixed cost? (2)
- 2.6 Copy and complete the table below using information on the graph:

DISTANCE (KM)	0	5	10	15	20	25	30
COST(R)	80	110					260

(4)

[14 marks]

### QUESTION 3

3.

Tom won a lottery of R100000, he wants to share his money with his friend Jerry in a ratio of 6:2	
3.1 Use a thousand separator to write the amount correctly	(2)
3.2 Calculate how much will each have	(4)
3.3 Increase Jerry's amount by 40%	(3)
3.4 Decrease tom's amount by 50%	(3)
3.5 Tom states that he was driving at 100km per hour to the lottery offices to claim his money.	
(a) Define the term <b>rate</b> .	(2)
(b) Is 100km per hour a ratio or a rate?	(2)
GRAND TOTAL = 50	