



education

Department of
Education
FREE STATE PROVINCE

MOTHEO EDUCATION DISTRICT

GRADE 8

MATHEMATICS

TEST

MARCH 2024

TOTAL MARKS: 50

DURATION: 1 HOUR

INSTRUCTIONS AND INFORMATION

1. This question paper consists of 4 questions.
2. Answer ALL the questions.
3. Clearly show ALL calculations that you have used in determining your answers.
4. Answers only will not necessarily be awarded full marks.
5. If necessary, round answers off to TWO decimal places, unless stated otherwise.
6. Number the answers correctly according to the numbering system used in this question paper.
7. Write legibly and present your work neatly.

QUESTION 1

- 1.1 Calculate $436 - 254$ using the column method (2)
- 1.2 Calculate $95 \div 4$ using long division (3)
- 1.3 Consider: 147 and 441
- 1.3.1 Express 147 and 441 as a product of its prime factors. (2)
- 1.3.2 Determine the lowest common multiple (LCM) of 147 and 441 (1)
- 1.3.3 Determine the highest common factor (HCF) of 147 and 441 (1)
- 1.4 Express the ratio 15: 21 in the simplest form. (1)
- 1.5 Decrease 30 in the ratio 8: 15 (2)
- 1.6 Increase 12 by 60% (2)

[14]

QUESTION 2

Use the calendar for March 2024 to answer the questions that follow:

March 2024						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

- 2.1 Write down all the prime numbers in the calendar (2)
- 2.2 Write down all the even numbers in the calendar (2)
- 2.3 Write down all the cube numbers in the calendar (2)
- 2.4 Write down all the factors of 30 in the calendar (2)

[8]

QUESTION 3

- 3.1 Sam and Palesa share 85 crayons in the ratio 6:7.
How many crayons will Palesa get? (3)
- 3.2 A bus travels 140 km in 2 hours. Calculate the average speed of the bus (3)
- 3.3 Value Added Tax (VAT) is added at 15% for good and services in South Africa.
What will be the selling price of a computer that costs R4 200 before VAT? (3)
- 3.4 Odin buys a pair of sneakers online for €58 in Germany.
The exchange rate is €1 = R20,80.
What is the price of the pair of sneakers in Rands? (2)
- 3.5 Thabiso buys a refrigerator worth R5 500 on a higher purchase agreement.
The agreement is structured as follows:
- 15% simple interest per annum.
 - 24 months to pay if off.
- Calculate Thabiso's monthly instalments (4)
- [15]

QUESTION 4

- 4.1 Arrange the following in ascending order
9; -8; 0; -2; 3 (1)
- 4.2 Calculate, **WITHOUT THE USE OF A CALCULATOR**
- 4.2.1 $\frac{1}{4} + \frac{5}{6}$ (2)
- 4.2.2 $15 + (-2) - (-1)$ (2)
- 4.2.3 $-5 \times (-1 - 3)$ (2)
- 4.2.4 $(-3)^2 + \sqrt[3]{-64}$ (3)
- 4.2.5 $\frac{2}{3} \div 3\frac{1}{2}$ (3)
- [13]

GRAND TOTAL: [50]