THABO MOFUTSANYANA EDUCATION DISTRICT

MATHEMATICS

GRADE 8

TEST

6 MARCH 2024

TOTAL: 50 MARKS

DURATION: 1 HOUR

THIS QUESTION PAPER CONSIST OF 4 PAGES INCLUDING COVER PAGE

INSTRUCTIONS AND INFORMATION

- Read the all the instructions carefully before answering the questions.

- This question paper consists of 4 questions.

- Write legibly and present your work neatly.

- Answer ALL the questions.

- Clearly show ALL steps that you have used in determining your answers.

- Answers only will not necessarily be awarded full marks.

- You may use an approved scientific calculator (non-programmable and non- graphical), unless stated otherwise.

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

Mathematics   TMED/March 2024
Grade 8   Test

QUESTION 1

1.1   Which property is demonstrated below:

      1.1.1 $15 \times 12 = 12 \times 15$ (1)

      1.1.2 $[(-7) + 3] + (-5) = (-7) + [3 + (-5)]$ (1)

      1.1.3 $-22 + 35 = 35 + (-22)$ (1)

1.2   Use distributive property to calculate 3×125.   (3)

1.3   Use calculation techniques to calculate:

      1.3.1 $2493 + 12464$ (2)

      1.3.2 $40536 \div 18$ (4)

1.4   Round off and compensate to calculate $924 + 677$ accurately   (3)

                                                                           [15]

QUESTION 2

2.1   Share 105 in a ratio 2:5   (3)

2.2   Decrease 148 in a ratio 4:3   (2)

2.3   Determine the LCM and HCF of 180 and 9000   (4)

2.4   Hloni buys a photocopier worth R90000 on hire purchase, by means of monthly
      payments, over the period of 3 years. The deposit of 10% of the cost is needed,
      and the balance will be paid by simple interest rate of 8% per annum over 3 years.

      2.4.1   How much is the deposit in cash?   (2)

      2.4.2   What will be the balance after the deposit?   (1)

      2.4.3   Calculate the total amount to be paid over the 3-year period.   (3)

      2.4.4   What will be his monthly instalment?   (1)

                                                                           [16]

Please turn over.

QUESTION 3

Calculate the following **WITHOUT** using a calculator:

3.1 $5 + \dfrac{4}{3-3}$ (2)

3.2 $-24 + 16 - 26 + 34$ (3)

3.3 $8 - 8 \times -\sqrt[3]{-125} \div 2^2 + (-3^2 - \sqrt{1})$ (4)

                                                                        [9]

QUESTION 4

4.1   If $a = \dfrac{1}{b} + \dfrac{1}{c}$ where $b = 3$ and $c = 5\dfrac{1}{2}$, determine the value of a.   (5)

4.2   Dakota volunteered at a gift-wrapping booth for a local charity. He volunteered for $2\dfrac{3}{4}$ hours and wrapped 11 gift boxes.

         How long did Dakota spend wrapping each gift box? If Dakota wrapped for the entire time and that he spent the same amount of time wrapping each box.   (5)

                                                                        [10]

Please turn over.