

MATHEMATICS GRADE 9
TASK 1
50 MARKS
Due Date 19th February 2025



INSTRUCTIONS AND INFORMATION

1. Read the following instructions carefully before answering the questions.
2. This question paper consists of 4 questions.
3. Answer ALL the questions.
4. Clearly show ALL calculations, diagrams, graphs, et cetera that you have used in determining your answers.
5. Answers only will NOT necessarily be awarded full marks.
6. **You may not use an approved scientific calculator** (non-programmable and non-graphical), unless stated otherwise.
7. If necessary, round off answers to TWO decimal places, unless stated otherwise.
8. Diagrams are NOT necessarily drawn to scale.
9. Number the answers correctly according to the numbering system used in this question paper.
10. Write neatly and legibly.

Question 1

- 1.1 Karabo and John are at the same rest stop alongside a highway. Karabo started driving along the highway at a constant speed of 80 km/h. An hour later, John started driving along the same highway in the same direction as Karabo at the constant speed of 100 km/h. How long will it take John to catch up with Karabo?
- 1.2 Complete the table and determine if the proportion is direct or indirect. Give a reason for your answer.

Numbers of pens	2	6	10		20
Price in Rands	7	21		42	

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Question 2. (ALL CALCULATIONS MUST BE DONE WITHOUT USING A CALCULATOR)

- 2.1 Write down each answer by inspection.
- 2.1.1 $57 - 9 \times 6$
- 2.1.2 $9 \times 7 + 84 \div 12$
- 2.1.3 $48 \div 6 \times 6$
- 2.1.4 $(67)^2 - 67 \times 67$ (4)
- 2.2 Estimate the answer of each of the following by rounding off both numbers to the nearest hundred.
- 2.2.1 a) $2371 + 1625$
- 2.2.2 b) $5362 \div 893$ (2)
- 2.3 Which of the following numbers are multiples of 36 ?
- 2.3.1 a) $2^2 \times 3^2 \times 5$
- 2.3.2 b) $2^2 \times 3^3 \times 5$
- 2.3.3 c) $2^4 \times 3^2 \times 5$
- 2.3 d) $2^3 \times 3^3$ (4)
- 2.4 Determine the value of a certain number which when multiplied by itself gives the same value as 567×63 . (2)

[12]

Question 3

- 3.1 Write down:
- 3.1.1 the prime factors of 132.
- 3.1.2 the HCF of 47 and 97.
- 3.1.3 the LCM of 24 and 96. (3)
- 3.2 Three boys take steps of 54 cm, 60 cm and 72 cm respectively. They start walking together in step from the same starting point and walk in the same direction. What is the shortest distance they must walk before they are in step again? (4)
- 3.3 Divide R 6500 in the ratio of 3: 4: 6. (4)
- 3.4 15 pears cost R5,60. How much will 27 of the same pears cost? (2)
- 3.5 7 men build a house in 300 days. How many men, working at the same rate, can build the house in 70 days? (2)
- [15]

Question 4

- 4.1 Calculate: **(ALL CALCULATIONS MUST BE DONE WITHOUT USING A CALCULATOR)**
- 4.1.1 $-7 - (-2)(4) - (-1)^3$ (2)
- 4.1.2 $(-48) \div (-6) - 6$ (2)
- 4.1.3 $(5)(-3)(-4) - 24 \div 6$ (2)
- 4.1.4 $\frac{-16 - (-8)(-20)}{(-11)(-8)}$ (2)
- 4.1.5 $\sqrt{8 - (-2)^3}$ (2)
- 4.1.6 $(7 + 2)^2 - (2 - 7)^2$ (2)
- 4.3 Calculate the value of t if:
- $$1,5 \times 174 = t \times 4,5 \times 87$$
- (2)

[14]

TOTAL: 50 MARKS