

# CYCLE TEST

**TERM 1**

**GRADE 9**

MATHEMATICS

# 2014

# SCHOOL BASED ASSESSMENT TASK

# MARKS: 50

# WEIGHTED MARK: 10

# SUGGESTED TIME: 1 hour

# TERM 1: Investigation

**INVESTIGATION**

**MARKS: 50 EXAMINER :**

**TIME: 1 hour MODERATOR:**

**This question paper consists of 4 pages**

1. Answer ALL questions.

2. A non-programmable calculator may be used unless otherwise stated.

3. In **question 1** write the letter of the correct answer only

4. Show all necessary steps in your working unless otherwise stated.

5. When answering questions, candidates must apply their knowledge, skills and insight.

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

7. Write neatly and legibly.

**Grade 9**

**Formal Assessment – TEST 5**

**Term 1**

|  |  |  |
| --- | --- | --- |
|  | **QUESTION 1** |  |
|  | Choose the correct answers |  |
| 1.1 | Write 0,00356 in scientific notation. |  |
| A. |  |  |
| B. |  |  |
| C. |  |  |
| D. |  |  |
|  |  | (2) |
| 1.2 | Divide R2 400 in the ratio 2: 3: 4. |  |
| A. | : : |  |
| B. | : : |  |
| C. | : : |  |
| D. | : : |  |
|  |  | (2) |
| 1.3 | Simplify : + 2 |  |
| A. | 27 |  |
| B. | 9 |  |
| C. | 18 |  |
| D. | 81 |  |
|  |  | (2) |
|  |  |  |
| 1.4 | Simplify |  |
| A. |  |  |
| B. |  |  |
| C. |  |  |
| D. |  |  |
|  |  | (2) |
| 1.5 | Solve for  if |  |
| A. |  |  |
| B. |  |  |
| C. |  |  |
| D. |  | (2) |
|  | **QUESTION 2** |  |
|  |  |  |
| 2.1 | Simplify: | (4) |
| 2.2 | If  and , find the value of | (3) |
| 2.3 | Solve for |  |
| 2.3.1 |  | (4) |
| 2.3.2 |  | (4) |
| 2.3.3 |  | (3) |
|  |  | [18] |
|  | **QUESTION 3** |  |
| 3.1 | A car travels a distance of 330 km at an average speed of 110 km/h. How long does it take the car to travel this distance? | (3) |
| 3.2 | Calculate the amount that will be in the bank after 4 years if R2500 was invested at 9% p.a. simple interest. | (4) |
| 3.3 | A pair of jeans marked at R250,00 is sold at a discount of 13%. Determine the selling price. | (3) |
|  |  | [10] |
|  |  |  |
|  |  |  |
|  | **QUESTION 4** |  |
|  | Study the flow diagram below and answer questions that follow. |  |
|  |  |  |
| 4.1 | Complete the flow chart. | (4) |
| 4.2 | Study the table below: |  |
|  | |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | *x* |  |  |  |  |  | … |  | … |  | … |  | | y |  |  |  |  |  | … |  | … |  | … | 61 | |  |
| 4.2.1 | What is the rule used to find values of or outputs | (3) |
| 4.2.2 | Use the rule to determine the values of and | (3) |
| 4.3 | Sketch the graph of | (2) |
|  |  | [11] |
|  | **TOTAL: 50** |  |



**Grade 9**

**Formal Assessment – TEST 5**

**Term 1**

**MEMORANDUM**

|  |  |  |
| --- | --- | --- |
|  | **QUESTION 1** |  |
| 1.1 | C | (2) |
| 1.2 | D | (2) |
| 1.3 | A | (2) |
| 1.4 | D | (2) |
| 1.5 | D | (2) |
|  |  | [10] |
|  | **QUESTION 2** |  |
|  | Simplify: |  |
| 2.1 |  |  |
| 2.2 |  | (3) |
| 2.3 |  |  |
| 2.3.1 |  | (4) |
| 2.3.2 |  | (4) |
| 2.3.3 |  | (3) |
|  |  | **[18]** |
|  | **QUESTION 3** |  |
| 3.1 |  | (3) |
| 3.2 | and | (4) |
| 3.3 | Selling price = R250-00 – R32,50 = R217,50 | (3) |
|  |  | [10] |
|  | **QUESTION 4** |  |
| 4.1 |  | (4) |
| 4.2 |  |  |
| 4.2.1 | Multiply by 2 and add 5  OR  OR | (3) |
| 4.2.2 | |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | *x* |  |  |  |  |  | … |  | … |  | … |  | | y |  |  |  |  |  | … |  | … |  | … | 61 | | (3) |
| 4.2.3 | 1 mark for intercept  1 mark for gradient | (2) |