MATHEMATICAL LITERACY

# GRADE 10

**Assignment 2**

**2019**

**SCHOOL BASED ASSESSMENT TASK**

# TOPIC: Basic Skills, Measurement and Finance

**MARKS: 50**

**WEIGHTED MARK: 10**

SUGGESTED TIME: 60 Minutes

# INSTRUCTIONS AND INFORMATION

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| 1. | This question paper consists of TWO questions. Answer ALL the questions. | | |
| 2. | Use the ANNEXURE to answer QUESTION 1.2 | | |
| 3. | Number the answers correctly according to the numbering system used in this question paper. | | |
| 4. | Start EACH question on a NEW page. | | |
| 5. | You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise. | | |
| 6. | Show ALL calculations clearly. | | |
| 7. | Round off ALL final answers appropriately according to the context, unless stated otherwise. | | |
| 8. | Indicate units of measurement, where applicable. | | |
| 9. | Maps and diagrams are NOT necessarily drawn to scale, unless stated otherwise. | | |
| 10. | Write neatly and legibly. | | |
| **QUESTION 1** | |  |  |

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| 1.1 | A bank charges 12% simple interest p.a. on cash loans to its clients. Tito has asked for a R10 000 loan amount and has promised to repay the loan over 4 years. |  |  |

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|  | 1.1.1 | Define the term interest in the given context. |  | (2) |

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|  | 1.1.2 | Re-write 12% as a common fraction in simple form. |  | (2) |

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|  | 1.1.3 | Convert 4 years to months. |  | (2) |

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|  | 1.1.4 | Calculate the interest which Tito should pay for the loan. |  | (4) |

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|  | 1.1.5 | Calculate the total amount Tito must pay back after 4 years. |  | (2) |

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|  | 1.1.6 | Give ONE reason why people loan money from banks. |  | (2) |

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| 1.2 | Banks can charge clients/customers fees for services rendered.  Study XYZ Bank tariff table on the ANNEXURE to answer the questions that follow. |  |  |

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|  | 1.2.1 | Write down the monthly fee for a Gold account. |  | (2) |

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|  | 1.2.2 | Calculate the bank charges if a client wants to send a cash amount of R450,00 to a friend at an ATM without using a card. |  | (3) |

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|  | 1.2.3 | Calculate the total bank charges for the month (Excluding the Monthly account fee) if the following transactions was made:   * R500 cash withdrawal from Branch counter * R200 External debit order * R 5 600 XYZ Bank ATM cash deposit |  | (8) |

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| **QUESTION 2** |  |  |

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| 2.1 | Cell 5 Network has increased their 2015 tariffs for the monthly subscription on the 100 Always-call-U charges of their contract phones. The fixed monthly contract rate will be R100 with free 100 minutes and then thereafter a call charge will be 50 cents per minute (or part of a minute).  **100 Always-call-U**  250  200  150  **Amount A (rands)**  100  50  0  0  100  200  **Time t (minutes)**  300  400 |  |  |

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

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|  | 2.1.1 | Copy and complete the table:   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Time, t (minutes)** | 0 | 50 | 100 | 150 | 200 | 250 | 300 | | **Call charges** | 0 | 0 | 0 | 25 | 50 | **D** | **E** | | **Amount, A (rand)** | **A** | 100 | **B** | 125 | 150 | **C** | 200 | |  | (5) |

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|  | 2.1.2 | Explain why the graph is plotted in a horizontal pattern from 0 to 100 minutes. |  | (2) |

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|  | 2.1.3 | If a person makes 37 calls of approximately 3 min each.  Calculate the total cost of these calls using, the table or the graph above. |  | (4) |

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|  | 2.1.4 | Is this graph above an example of direct or indirect proportion? |  | (2) |

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| 2.2 | A grade 10 class is going to bake muffins.  The recipe that they are going to use requires the following ingredients |  |  |

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|  | 2.2.1 | Convert 375 ml to litres. |  | (2) |

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|  | 2.2.2 | How many eggs will be needed to bake 156 muffins? |  | (3) |

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|  | 2.2.3 | The students need to make 504 muffins, using muffin trays that hold 6 muffins per tray. They plan to put 4 trays at a time into a oven. Each oven takes 20 minutes to bake. How long will they take to make 504 muffins if they will be using 4 ovens? |  | (5) |

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**ANNEXURE A**

**QUESTION 1.2**

**XYZ BANK’s tariff table**

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| **Transaction type** |  |
| **Monthly Fees** | |
| Monthly account fee | R22 (Current Account)  R30 (Silver, Gold, Platinum) |
| **Deposits** | |
| Cash deposit: Branch counter | R4,85 + 1,15% of deposit value |
| Cash deposit: XYZBANK ATM | R1,10 per R100 (or part thereof) |
|  | |
| **Cash Withdrawals** | |
| Branch Counter | R27,00 + R1,15/R100 (max R500) |
| XYZBANK ATM | R3,85 + R1,10/R100 |
| **Account payments** | |
| * XYZBANK ATM * Branch counter | R3,75 + R0,75/R100 R33,00 |
| **Debit and stop orders** | |
| * Internal * External stop order * External debit order | R5,20  R3,75 + R0,75/R100 (max R15,00) R3,75 + R0,75/R100 (max R25,00) |
| **Electronic Funds transfer** | |
| * XYZBANK ATM * Branch counter | R3,15 R33,00 |
| CASH SEND (XYZBANK ATM) | R6,90 + R1,05/R100 |