

## **GENERAL EDUCATION AND TRAINING CERTIFICATE**

## **NQF LEVEL 1**

## **ABET LEVEL 4 SITE-BASED ASSESSMENT**

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| **LEARNING AREA** | **:** | **MATHEMATICAL LITERACY** |
| **CODE** | **:** | **MLMS4** |
| **TASK** | **:** | **ASSIGNMENT** |
| **TIME** | **:** | **90 MINUTES** |
| **MARKS** | **:** | **50** |

**This assessment task consists of 6 pages**.



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| **INSTRUCTIONS AND INFORMATION** |  |  |

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| 1. | Answer ALL the questions in the ANSWER BOOK. |  |  |

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| 2. | Calculators may be used but ALL calculations must be shown. |  |  |

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| QUESTION 1 |  |  |

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| 1.1 | Calculate the following and write your answers in the simplest form. Please show all your calculations. |  |  |

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|  | 1.1.1 | 350 – (21 + 11) |  | (1) |

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|  | 1.1.2 | 3,4 - 2,44 + 5,13 |  | (1) |

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|  | 1.1.3 | 4 - 1 + 2 |  | (3) |

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|  | 1.1.4 | 3,1 + 2,4 |  | (2) |

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|  | 1.1.5 | - |  | (2) |

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|  | 1.1.6 | 76 |  | (2) |

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| 1.2 | Peter and Sandile are both on diet. Peter weighed 121 kg and Sandile 103 kg. After a week they weighed themselves:   |  |  | | --- | --- | | Peter | Sandile | | 118 kg | 105 kg |   Who lost the most weight? |  | (1) |

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| 1.3 | Write 825 in expanded form. |  | (1) |

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| 1.4 | Arrange the following in descending order.  0,8333 ; ; 81,1% |  | (3) |

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| 1.5 | Express 1,21 as a mixed fraction. |  | (1) |

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| 1.6 | Write 51% as a proper fraction. |  | (1) |

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| 1.7 | Pappa Shelley recently opened a mobile shop. Amongst other he sells the following: |  |  |

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|  | |  |  | | --- | --- | | White Bread | R 9,50 | | Paraffin | R 11,20 per litre | | Mealiemeal | R 9,95 per kg | | Tinned Pilchards | R 11,49 per 450 g can. | | Samp and beans | R 6,99 per 500 g pack. | |  |  |

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|  | 1.7.1 | Thembi’s mother sent her to buy the following:   * 1 litre of paraffin * 3 kg of mealiemeal * 2 white breads * 1 pack of samp and beans   Calculate the total cost of the above mentioned groceries |  | (3) |

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|  | 1.7.2 | Thembi paid with a R 100 note. How much change did she get? |  | (1) |

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|  | 1.7.3 | How many tins of pilchards can be bought for R 50,00 |  | (1) |

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| 1.8 | Replace the empty box with the correct number: |  |  |

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|  | ?  ↓  multiply by 5  ↓  divide by 10  ↓  add 14  ↓  answer = 20 |  | (1) |

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| 1.9 | What fraction of the whole is shaded? |  |  |

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|  |  |  | (1)  **[25]** |

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| **QUESTION 2** |  |  |

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| 2.1 | Siphiwe and his family travelled from Cape Town to Kimberley for the winter school holidays. They left Cape Town at 08:00 and arrived in Kimberley at 18:00 the same day. The distance from Cape Town to Kimberley is 870 km using the freeway. During their journey they stopped in Three Sisters and bought some refreshments. Siphiwe paid R 142 for the refreshments. They spent 40 minutes in Three Sisters. |  |  |

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|  | 2.1.1 | How long did Siphiwe and his family take to drive from Cape Town to Kimberley? |  | (1) |

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|  | 2.1.2 | What was their actual driving time? |  | (1) |

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|  | 2.1.3 | Calculate their average speed. |  | (2) |

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|  | 2.1.4 | Since the speed limit on South African freeway roads is 120km/h, do you think Siphiwe was complying with the speed limit? Give a reason for your answer. |  | (2) |

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|  | 2.1.5 | If their vehicle used 7 litres of diesel for every 120 kilometres travelled, calculate the total amount of fuel used for their journey. |  | (2) |

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|  | 2.1.6 | The cost of fuel at the time of their trip was R 11,18 per litre. The toll fees at the Huguenot Toll Plaza was R29,00. Calculate the total cost of their single trip to Kimberley including the cost of their refreshments. |  | (3) |

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| 2.2 | During their stay in Kimberley they decided to go on sight-seeing trips. They used the following map. |  |  |

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|  | 2.2.1 | In which province is Kimberley situated? |  | (1) |

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|  | 2.2.2 | Siphiwe decided to visit his mother in Prieska. In which direction did they drive from Kimberley? |  | (1) |

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|  | 2.2.3 | From Prieska they drove to Postmasburg. In which direction did they drive? |  | (1) |

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|  | 2.2.4 | Kimberley is situated in C5. Give the grid references of :   1. Kakamas 2. Colesburg |  | (2) |

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|  | 2.2.5 | One day the family went camping at a dam within the province. Give the name of the dam. |  | (1)  **[17]** |

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| **QUESTION 3** |  |  |

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| 3.1 | **A ladder that is 5 meters tall is placed against the side of a tree. The base of the tree to the top of the ladder is a distance of 3 meters. How far is the foot of the ladder placed away from the base of the tree? Use the theorem of Pythagoras: c2 = a2 + b2**  b = 3 m  c = 5 m  ladder |  | (4) |

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| 3.2 | Determine the volume of the following hot water cylinder.  (Use the formula: Volume = π r²  h, where π = 3,14)  2,5 m      *Luxury Hot Water Cylinders*  40cm |  | (4)  **[8]** |

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|  | **TOTAL:** |  | **50** |