

## **GENERAL EDUCATION AND TRAINING CERTIFICATE**

## **NQF LEVEL 1**

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

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| **LEARNING AREA** | **:** | **MATHEMATICS AND MATHEMATICAL SCIENCES** |
| **CODE** | **:** | **MMSC4** |
| **TOOL** | **:** | **WORKSHEET** |
| **DURATION** | **:** | **2 HOURS** |
| **MARKS** | **:** | **50** |

**This assessment tool consists of 4 pages.**

**2**

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| **Activity 1: Interpreting and investigating of graphs** |  |  |

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| 1.1 |  |  | (1) |

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| 1.2 | Yes, because the graph is a straight line. |  | (1) |

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| 1.3 |  | Correct substitution  Correct answer | (2) |

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| 1.4 | As we move from left to right the straight line graph is going down |  | (2) |

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| 1.5 |  |  | (1) |

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| 1.6 | The height of water decreasing by 2in every one second. |  | (1) |

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| 1.7 |  |  | (2) |

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|  | 1.8.1 |  | Correct substitution  Correct answer | (2) |

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|  | 1.8.2 | 24 sec | Correct substitution  Correct answer | (2) |

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| 1.9 | Continuous |  | (1) |

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| **Activity 2: Theorem of Pythagoras** |  |  |

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| 2.1 | 2.1.1 |  | Correct answer | (1) |

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|  | 2.1.2 |  | Squaring  Correct answer | (2) |

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|  | 2.1.3 | James is incorrect  OR  is not a right, because the square of the longest side is not equal to the sum of the squares of the other two sides | Correct answer  Squaring/Reason | (2) |

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|  | 2.1.4 |  | Substitution  Squaring  Answer | (3) |

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| 2.2 |  | |  |  |  | | --- | --- | --- | |  |  |  | | 3 | 4 | 5 | | 9 | 12 | 15 | | 12 | 16 | 20 | | 15 | 20 | 25 | | Correct row  Correct row  Correct row | (3) |

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| 2.3 | 2.3.1 | 12m |  | (1) |

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|  | 2.3.2 |  | Substitution/ Squaring  Correct answer | (2) |

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|  | 2.3.3 | No, AC reaches further up the vertical flag pole than CE from the same position, so it is longer than CE  OR  CE  CA  CA CE | No, relevant reason | (2)  [16] |

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| **Activity 3: Word Sums** |  |  |

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|  | 3.1 | Let the certain number be | Identification of values  Equation  Answer | (3) |

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|  | 3. 2 |  | Identification  Identification  Equation  Simplification  Answer | (5) |

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|  | 3.3 | |  |  |  | | --- | --- | --- | |  | Age Now |  | | Paul |  |  | | Sihle |  |  |   Paul = 2(Sihle)  Sihle is 17 and Paul is 17+23=40 | 2 completing table correctly  Equating  2 Answers | (5) |

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|  | 3.4 | |  |  |  | | --- | --- | --- | |  | Age Now |  | | Father |  |  | | Son |  |  |   Father = 3(Son)  Father is 40 and son is | 2 Completing table correctly  Equating  2 Answers | (5)  **[18]** |

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