

## GAUTENG DEPARTMENT OF EDUCATION

|  |  |  |
| --- | --- | --- |
| **Memorandum** | | |
| **SUBJECT** | **:** | **MATHEMATICS** |
| **GRADE** | **:** | **9** |
| **TASK** | **:** | **Term 3 Test** |
| **MARKS** | **:** | **50** |
| **DURATION** | **:** | **1 Hour** |

**Question 1 [Multiple Choice]**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | | D**🗸** | B**🗸** | C**🗸** | B**🗸** | D**🗸** | | **[5]** |

**Question 2**

|  |  |  |
| --- | --- | --- |
| 2.1 | 1 mark for each correct output value. | (3) |
| 2.2 | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  | 🗸A | |  |  |  |  |  |  | 🗸A |   1 mark for all values of written correctly  1 mark for all values of written correctly | (2) |
| 2.3 | 1 mark for correct value of k  1 mark for correct value of m | (2) |
| **[7]** | | |

**Question 3**

|  |  |  |  |
| --- | --- | --- | --- |
| 3.1 | Chart, line chart  Description automatically generated | |  |
|  | 3.1.1 | 1 mark for correct shape  1 mark for correct y-intercept ()  1 mark for correct x-intercept (between 1 and 2) | (3) |
|  | 3.1.2 | 1 mark for plotting at least 4 points correctly  1 mark for joining the points to get a curved graph (CA applies) | (2) |
| 3.2 | **3.1.1** | | (1) |
| 3.3 | The minimum value is | | (1) |
| 3.4 | 2 marks for  2 marks for | | (4) |
| **[11]** | | | |

**Question 4**

|  |  |  |  |
| --- | --- | --- | --- |
|  | 4.1.1 | Reflection | (1) |
|  | 4.1.2 | Translation | (1) |
| 4.2 | |  |  | | --- | --- | | **Original Image Vertex** | **Reflected Image Vertex** | |  |  | |  |  | |  |  |   1 mark for each correct point. | | (3) |
| **[5]** | | | |

**Question 5**

|  |  |  |  |
| --- | --- | --- | --- |
| 5.1 | or or  1 mark for any one of the above notations. | | (1) |
|  | 5.2.1. | The lines **are parallel** because the **corresponding angles are equal** | (2) |
|  | 5.2.2 | The lines **are not parallel** because the **co-interior angles are not equal.** | (2) |
|  | 5.2.3 | The lines **are parallel** because the **alternating angles are equal** | (2) |
| 5.3 | Given: and EC bisects  Shape  Description automatically generated  Prove that .   |  |  | | --- | --- | | **Statement** | **Reason** | |  |  | |  |  | | But: | Given: EC bisects | |  | Proven Above | | | (5) |
| **[12]** | | | |

**Question 6**

|  |  |  |  |
| --- | --- | --- | --- |
|  | 6.1.1 |  | (1) |
|  | 6.1.2 | **Square**  **Rhombus**. | (2) |
| 6.2 | If and then the quadrilateral above is a **Parallelogram**, because **Both pairs of opposite angles are equal** | | (2) |
|  |  | |  |
| 6.3 | below is a Trapezium, and .  Shape  Description automatically generated | |  |
|  | 6.3.1 | |  |  | | --- | --- | | **Statement** | **Reason** | |  |  |   OR   |  |  | | --- | --- | | **Statement** | **Reason** | |  |  | | (3) |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 6.3.2 | |  |  | | --- | --- | | **Statement** | **Reason** | |  | Given ABCD is a Trapezium |   OR   |  |  | | --- | --- | | **Statement** | **Reason** | |  |  | | (2) |
| **[10]** | | | |