



## GAUTENG DEPARTMENT OF EDUCATION

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

**GAUTENG DEPARTMENT OF EDUCATION**

**EXEMPLAR**

**TERM 3 2021**

**GRADE 9**

|  |
| --- |
|  |
| **MATHEMATICS** |
|  |

**MARKING GUIDELINES**

|  |  |
| --- | --- |
|  |  |
| **6 pages** |  |

**QUESTION / *VRAAG* 1**

|  |  |
| --- | --- |
| 1.1 | D**✓** |
| 1.2 | C**✓** |
| 1.3 | B**✓** |
| 1.4 | C**✓** |
| 1.5 | B**✓** |

[5]

**QUESTION / *VRAAG* 2**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2.1 | |  | | --- | | ANSWER | | 1. C**✓** | | 2. A**✓** | | 3. B**✓** |   (3) | |
| 2.2.1 | **=**  **= 27 + 6**  **= 33✓**    **=**    **=**    **= ✓** | Answer / *Antwoord:* 1 mark / *1 punt*  Answer / *Antwoord:* 1 mark / *1 punt* |
| 2.2.2 | 2 =      -2 + 1 =  - 1 = | Answer / *Antwoord* 1 mark /*1 punt*  Answer / *Antwoord* 1 mark /*1 punt* |
| 2.2.3 |  | 1 mark each term /*1 punt elk* |
|  |  | [9] |

**QUESTION / *VRAAG* 3**

|  |  |  |
| --- | --- | --- |
| 3.1.1 |  | :1 mark / *1 punt*  :1 mark / *1 punt* |
| 3.2.1 | a = -7    **b = -1** | 1 mark / *1 punt*  :1 mark / *1 punt*  :1 mark / *1 punt* |
| 3.2.2 |  | Straight line graph :1 mark / *1 punt*  Slope: :1 mark / *1 punt*  x intercept :1 mark / *1 punt*  y intercept :1 mark / *1 punt* |
|  |  | [9] |

**QUESTION / *VRAAG* 4**

|  |  |  |
| --- | --- | --- |
| 4.1.1 | . | ✓  ✓ |
| 4.1.2 |  | :1 mark / *1 punt*  :1 mark / *1 punt* |
| 4.1.3 |  | |
| 4.1.4 | (shown on grid) | |
|  | [9] | |

**QUESTION / *VRAAG* 5**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5.1 | |  |  |  | | --- | --- | --- | |  | Statement | Reason | | 5.1.1 |  | Corresponding angles LM//SN**✓** | | 5.1.2 |  | Alternate angles KL//NM**✓** | | 5.1.3 |  | Alternate angles KL//NM**✓** | | 1 mark for reasoning / *1 punt* *vir redenasie*  1 mark for reasoning / *1 punt* *vir redenasie*  1 mark for reasoning / *1 punt* *vir redenasie* |
| 5.2.1 | 2𝑥+15°=5𝑥−15°**✓** alt ∠𝑠, AS//DC **✓**  15°+15°=5𝑥−2𝑥  30°=3𝑥  𝑥=10° **✓** | 1 mark for statement  1 mark for reason  1 mark for answer / *1 punt* *vir antwoord* |
| 5.2.3 | Method 1:  = 35°+90°  =125° **✓**  +=180° co-int ∠𝑠, AS//DC **✓**  = 180°−125°  =55° **✓**  **Or**  +=180° sum of interior angles of triangle **✓**  +=180°  **=** 180° - 20**✓**  = =55°**✓** | 1 mark for 125°  1 mark for statement + reason  1 mark for answer / *1 punt* *vir antwoord* |
|  |  | [9] |

**QUESTION / *VRAAG* 6**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6.1.1 | |  |  | | --- | --- | | STATEMENT | REASON | |  |  | | += 180°  = 180° - ()  =  += 180°  = 180° -  = 130° | (sum of interior angle of triangles)    (opposite angles of parallelogram are equal) | | Statement + reason **✓**  Statement**✓** + reason **✓**  += 180°**✓**  = 130°**✓** |
| 6.2.1 | 1800 – ( 700 + 320 ) (The total sum of the interior angle of a triangle = )  = (opposites angles of a parallelogram are equal) | ✓  ✓  ✓ =  ✓ (opposites angles of a parallelogram are equal) |
|  |  | [9] |

|  |  |  |
| --- | --- | --- |
|  | **TOTAL / *TOTAAL*** | **50** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **TOPIC WEIGHTINGS**  **GRADE : 9 EXEMPLAR TEST** | | | | | | |
| **TOPICS** | **FUNCTIONS AND RELATIONSHIPS** | **GRAPHS** | **TRANSFORMATION GEOMETRY** | **STRAIGHT LINE GEOMETRY** | **GEOMETRY OF 2D SHAPES + CONSTRUCTIONS** | **TOTAL** |
| **WEIGHTING** | **20** | **20** | **20** | **20** | **20** | **100%** |
| **QUESTION 1** | **1.1(1)** | **1.2(1)** | **1.3(1)** | **1.4(1)** | **1.5(1)** | **5** |
| **QUESTION 2** | **9** |  |  |  |  | **9** |
| **QUESTION 3** |  | **9** |  |  |  | **9** |
| **QUESTION 4** |  | **4.1.3(2)** | **7** |  |  | **9** |
| **QUESTION 5** |  |  |  | **9** |  | **9** |
| **QUESTION 6** |  |  |  |  | **9** | **9** |
| **MARK TOTAL** | **10** | **12** | **8** | **10** | **10** | **50** |
| **%** | **20** | **24** | **16** | **20** | **20** | **100** |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **COGNITIVE LEVEL WEIGHTINGS**  **GRADE : 9 EXEMPLAR TEST** | | | | | | | | |
| **GRADE** | **KNOWLEDGE QUESTIONS**  **25%** | | **ROUTINE PROCEDURES**  **45%** | | **COMPLEX QUESTIONS**  **20%** | | **PROBLEM SOLVING**  **10%** | |
| **9** | **QUESTION** | **MARK** | **QUESTION** | **MARK** | **QUESTION** | **MARK** | **QUESTION** | **MARK** |
| **1.1** | **1** | **1.4** | **1** | **4.1.4** | **3** | **6.1.1** | **5** |
| **1.2** | **1** | **2.2** | **6** | **5.2.2** | **3** |  |  |
| **1.3** | **1** | **3.1** | **2** | **6.2.1** | **4** |  |  |
| **1.5** | **1** | **3.2** | **7** |  |  |  |  |
| **2.1** | **3** | **4.1.2** | **2** |  |  |  |  |
| **4.1.1** | **2** | **4.1.3** | **2** |  |  |  |  |
| **5.1** | **3** | **5.2.1** | **3** |  |  |  |  |
| **TOTAL MARKS** | **12** | | **23** | | **10** | | **5** | |
| **%** | **24%** | | **46%** | | **20%** | | **10%** | |