

**GAUTENG DEPARTMENT OF EDUCATION**

**VOORBEELD**

**KWARTAAL 3 2021**

**GRAAD 9**

|  |
| --- |
|  |
| **WISKUNDE** |
|  |

**NASIENRIGLYNE**

|  |  |
| --- | --- |
|  |  |
| **6 bladsye** |  |

**QUESTION / *VRAAG* 1**

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

[5]

**QUESTION / *VRAAG* 2**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2.1 | |  | | --- | | Antwoord | | 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 |  | Reguitlyngrafiek :1 mark / *1 punt*  Gradiënt: :1 mark / *1 punt*  x afsnit :1 mark / *1 punt*  y afsnit :1 mark / *1 punt* |
|  |  | [9] |

**QUESTION / *VRAAG* 4**

|  |  |  |
| --- | --- | --- |
| 4.1.1 | te vorm. | ✓  ✓ |
| 4.1.2 |  | :1 mark / *1 punt*  :1 mark / *1 punt* |
| 4.1.3 |  | |
| 4.1.4 | (soos op die assestelsel ) | |
|  | [9] | |

**QUESTION / *VRAAG* 5**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5.1 | |  |  |  | | --- | --- | --- | |  | Bewering | Rede | | 5.1.1 |  | Ooreenkomstige hoeke LM//SN**✓** | | 5.1.2 |  | Verwisselende hoeke KL//NM**✓** | | 5.1.3 |  | Verwisselende hoeke 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°**✓** verwisselende ∠e, AS//DC **✓**  15°+15°=5𝑥−2𝑥  30°=3𝑥  𝑥=10° **✓** | 1 punt vir bewering  1 punt vir rede  1 mark for answer / *1 punt* *vir antwoord* |
| 5.2.3 | Metode 1:  = 35°+90°  =125° **✓**  +=180° ko-binne ∠e, AS//DC **✓**  = 180°−125°  =55° **✓**  **OF**  +=180° som van die binnehoeke van ‘n driehoek **✓**  +=180°  **=** 180° - 20**✓**  = =55°**✓** | 1 punt vir 125°  1 punt vir bewering en rede  1 mark for answer / *1 punt* *vir antwoord* |
|  |  | [9] |

**QUESTION / *VRAAG* 6**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6.1.1 | |  |  | | --- | --- | | BEWERING | Waar of vals | | 1. As ABCD ‘n parallelogram is, dan is die som van die hoeke ***x, y*** en ***z*** gelyk aan 1800. | Waar **✓** | | 1. As ABCD ‘n ruit is, met = 1300, dan is die waarde van ***x*** 250. | Waar **✓** | | 1. As ABCD ‘n ruit is, is die waarde van *w* gelyk aan 1800. | Vals **✓** | | 1. As ABCD ‘n parallelogram is, waar x + y = 1300, dan is die waarde van ***z*** 500. | Vals **✓** | |  |
| 6.2.1 | Parallelogram **✓** | 1 mark for answer / *1 punt*  *vir antwoord* |
| 6.2.2 | 1800 – ( 700 + 320 ) som van die binnehoeke van ‘n driehoek **✓**  **✓**  = oorstaande hoeke van ‘n parallelogram is gelyk **✓** | ✓  ✓  ✓ =  ✓ oorstaande hoeke van ‘n parallelogram is gelyk |
|  |  | [9] |

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