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|  | Mathematics/ Wiskunde  **MEMORANDUM** | Grade 7  Term /Kwartaal 2  Activity 2 Investigation/Ondersoek |
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**General marking note:**

1. **Give full marks for answers only, unless otherwise stated.**
2. **Accept any alternative correct solution that is not included in the memorandum.**
3. **Apply CA when applicable**

**MARKS: 50**

| **QUEST** | | **EXPECTED ANSWER** | **CLARIFICATION** | **MARK** | **TOTAL** |
| --- | --- | --- | --- | --- | --- |
| 1 |  | |  |  |  |  | | --- | --- | --- | --- | | **No.** | **Name of form** | **Perimeter** | **Area** | | **1** | Vierkant/ Square | 8 ✓ | 4 ✓ | | **2** | Reghoek/ Rectangle | 26 ✓ | 30 ✓ | | **3** | Reghoek/ Rectangle | 22 ✓ | 30 ✓ | | **4** | Reghoek/ Rectangle | 34 ✓ | 30 ✓ | | **5** | Reghoek/ Rectangle | 34 ✓ | 72 ✓ | | One mark for each correct answer. | 10 | **15** |
| 1.2 |  | Shapes can have the same perimeter but different areas.✓✓  Shapes can also have the same area but have different perimeters.✓✓  If you increase the size of the shape, the area and the perimeter don’t always increase by the same amount.✓✓ | 2 Marks for any relevant reason/s provided. | 2 |
| 1.3 |  | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  | | Or any other shape with the same properties eg. 8 x 8 etc.✓✓✓ | 3 |
| 2 | a | 195 mm x 100= 19 500 m  19 500m= 19,5 km ✓ | One mark for correct answer | 1 | **7** |
| b | 50 mm x 100= 5000 m  5000m = 5 km ✓ | One mark for correct answer | 1 |
| c | A-F = 170 mm  170mm x 100= 17 000 m ✓  17 000m = 17 km ✓  17 Km: 110 Km  17/110 x 60 min = 9,27 min ✓✓ | Two mark for correct conversion.Two mark for correct calculation.  Full marks answer only. | 4 |
| d | Using a string and a ruler or any other method if applicable ✓ |  | 1 |
| 3 | a | |  |  |  | | --- | --- | --- | | **No.** | **Name** | **Area** | | **1** | Vierkant/Square ✓ | 4 cm² ✓ | | **2** | Isosceles/Right Angled Triangle/ Reghoekige driehoek ✓ | 8 cm²✓ | | **3** | Isosceles/Right Angled Triangle/ Reghoekige Driehoek ✓ | 2 cm² ✓ | | **4** | Isosceles/Right Angled Triangle/ Reghoekige Driehoek ✓ | 8 cm² ✓ | | **5** | Parallelogram/ Parallelogram ✓ | 4 cm² ✓ | | **6** | **Isosceles/Right Angled Triangle/ Reghoekige driehoek** | 2 cm² | | **7** | Equilateral Triangle/ Gelyksydige Driehoek ✓ | 4 cm² ✓ | | One mark for each correct answer | 12 |  |
|  | b | Half a block plus half a block = 1 Block ✓  2 cm x 2 cm = 4 cm² ✓ | Accept any alternative correct solution | 2 |
| c | . Area of rectangle = L x B  = 8 km x 2 km  = 16 km² ✓  Area of Square = Side x Side  = 4 km x 4 km  = 16 km² ✓  Area of Triangle = ½ b x h  = 2 km x 8 km  = 16 km² ✓  Yes, it is a fair distribution of land. ✓ | One mark for each correct answer calculation.  One mark for conclusion drawn. | 4 | **18** |
| 4 | a | 10 x 0,5 cm²✓= 5 cm² ✓ | One mark for calculation and one mark for answer.  Answer only= 2 marks | 2 |  |
|  | b | ✓= ✓ | Two marks for correct answer | 2 |
|  | c | A= 11 blocks ✓  B= 10 blocks ✓  A has the bigger Area✓ | One mark each for correct answer and conclusion.  If only answer full marks. | 3 |
|  | d | Rectangle= L x B  = 10 m x 7 m = 70 m²  Rectangle= L x B  = 5 m x 4 m = 20 m²✓  Rectangle= L x B  = 2 m x 4 m = 8 m²✓  Area of Shape= 70 m²- 20 m²- 8 m² = 42 m²✓  **Or**  10 m x 3 m = 30 m²✓  4 m x 3 m = 12 m²✓  Area of Shape = 30 m² + 12 m²= 42 m²✓ | Accept any alternative correct solution | 3 | **10** |

**TOTAL= 50 MARKS**