

**Gauteng North District Paper**

**MATHEMATICS September 2023**

**GRADE 7 1 HOUR**

**TEST 40 MARKS**

MARKING GUIDELINE

**This marking guideline consists of 4 pages**

**Different methods can be used**

**Apply CA where relevant**

**Question 1 [Multiple Choice]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.1 | 1.2 | 1.3 | 1.4 | 1.5 |
| B**🗸** | A**🗸** | B**🗸** | B**🗸** | D**🗸** |

**Question 2 [Algebraic Expressions]**

|  |  |  |  |
| --- | --- | --- | --- |
| **2** | **SOLUTIONS** | **MARK ALLOCATION** | **Marks** |
| 2.1.1 | angle | **🗸** | 1 |
| 2.1.2 | angle | **🗸** | 1 |
| 2.1.3 | angle | **🗸** | 1 |
| 2.2.1 | CB is parallel to AF/AG  Or  BG is parallel to CF | Correct pair of parallel lines | 1 |
| 2.2.2 | AC is perpendicular to BD  Or  BE is perpendicular to CF | Correct pair of perpendicular lines | 1 |
| 2.2.3 | is a **reflex angle** | **🗸** | 1 |
| 2.3.1 | **Segment**: A segment of a circle can be defined as a region bounded by a chord and a corresponding arc lying between the chord's endpoints. | Segment**🗸**  Area between chord and corresponding arc**🗸🗸** | 3 |
| 2.3.2 | **Sector:** A region of the circle enclosed by two radii and the corresponding arc. | Sector**🗸**  Area between radii and corresponding arc**🗸🗸** | (3) |
| 2.4.1 | AB is a chord | chord**🗸** | 1 |
| 2.4.2 |  | 6,5cm**🗸** | 1 |
|  | **TOTAL** |  | 14 |

**Question 3 [Geometry of 2D Shapes]**

|  |  |  |  |
| --- | --- | --- | --- |
| **3** | **SOLUTIONS** | **MARK ALLOCATION** | Marks |
| 3.1 | Equilateral triangle | equilateral**🗸** | 1 |
| 3.2.1 | Kite | answer**🗸** | 1 |
| 3.2.2 | Both of pairs of adjacent sides are equal | answer**🗸** | 1 |
| 3.2.3 |  | answer**🗸** | 1 |
| 3.3 | angles opposite equal sides of an isosceles triangle are equal | answer**🗸**  reason **🗸** | 2 |
| 3.4 | all sides of a rhombus are equal | answer**🗸**  reason **🗸** | 2 |
| 3.5.1 | C and E. They are EXACTLY the same (shape and size). | answer**🗸**  reason **🗸** | 2 |
| 3.5.2 | B and D. They have the same shape, but not the same size. | answer**🗸**  reason **🗸** | 2 |
|  | **TOTAL** |  | 12 |

**Question 4 [Transformation Geometry]**

|  |  |  |  |
| --- | --- | --- | --- |
| 4 | **SOLUTIONS** | **MARK ALLOCATION** | Marks |
| 4.1 | H T V X | Correct answer**🗸** | 1 |
| 4.2 |  | All three vertices slided 3 units up**🗸🗸**  All three vertices slided 6 units left**🗸🗸** | 4 |
| 4.3 | Enlarge rectangle A by a scale factor of 3 as such that the legnth of rectangle A multiplied by 3 is 9 which is the length of rectangle B and the breadth of rectangle A is multiplied by 3 which is 6 the breadth of rectangle B. After this transformation rectangle A and B have the same shape and size making them congurent. | enlargement**🗸**  multiply length and breadth (all sides) by scale factor 3**🗸🗸**  same shape and size (congruent)**🗸** | 4 |
|  | **TOTAL** |  | 09 |