

Education

KwaZulu-Natal Department of Education

REPUBLIC OF SOUTH AFRICA

**MATHEMATICS**

**COMMON TEST**

# MARCH 2018

**MARKING GUIDELINE**

# NATIONAL

# SENIOR CERTIFICATE

# GRADE 10

# MARKS: 50

## TIME: hour

##### This marking guideline consists of 5 pages.

**QUESTION 1**

|  |  |  |
| --- | --- | --- |
| 1.1.1 |  | ✓  ✓  (2) |
| 1.1.2 | = | ✓  ✓  (2) |
| 1.2.1 |  | ✓  ✓  ✓  ✓  (4) |
| 1.2.2 |  | ✓  denominator  ✓  numerator  ✓ answer  (3)  **[11]** |

**QUESTION 2**

|  |  |  |
| --- | --- | --- |
| 2.1 |  | ✓ prime bases    🗸raising powers  🗸answer (3) |

|  |  |  |
| --- | --- | --- |
| 2.2.1 |  | ✓  prime base  ✓ answer  (2) |

|  |  |  |
| --- | --- | --- |
| 2.2.2 |  | ✓  ✓ bracket i.e. (  ✓ answer  (3) |
| 2.3.1 |  | ✓  common base  ✓ equating exponents    (2) |
| 2.3.2 |  | ✓  (1) |
| 2.3.3 | ……. (1)  ……. (2) (1) + (2)          =  = 45 | ✓solving simultaneously  (any method)  ✓  ✓  ✓ answer (4)  **[15]** |

**QUESTION 3**

|  |  |  |
| --- | --- | --- |
| 3.1.1 |  | ✓ factors  ✓  (2) |
| 3.1.2 |  | ✓ dividing byor  squaring both sides  ✓ answer  (2) |
| 3.1.3 | 3.1.3.1 | ✓  (1) |
|  | 3.1.3.2 | ✓  (1) |
| 3.2 |  | ✓  ✓  (2)  **[8]** |

**QUESTION 4**

|  |  |  |
| --- | --- | --- |
| 4.1 | 13 tiles and 16 tiles | ✓ 13 and 16  (1) |
| 4.2 |  | ✓ 3*n* ✓ +1  (2) |
| 4.3 | = 601 tiles | ✓ substitution  ✓ answer  (2) |
| 4.4 | There will be 1000 tiles in pattern 333. | ✓ substitution  ✓ answer  (2) **[7]** |

**QUESTION 5**

|  |  |  |
| --- | --- | --- |
| 5.1.1 |  | ✓  (1) |
| 5.1.2 |  | ✓  (1) |
| 5.2 |  | ✓  ✓  ✓  (3) |

|  |  |  |
| --- | --- | --- |
| 5.3 | Height of Short Tree        Height of Tall Tree | ✓  using correct trig ratio  ✓  ✓ CA  ✓ CA  (4)  **[9]** |

**TOTAL MARKS: 50**