**EKURHULENI NORTH DISTRICT**

**GRADE 11**

**JUNE EXAMINATION 2019**

**MATHEMATICAL LITERACY**

**PAPER 1**

**MEMORANDUM / MARKING GUIDELINE**

|  |  |
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| **SYMBOL** | **EXPLANATION** |
| C | Conversion |
| SF | Substitution in a formula |
| M | Method |
| A | Accuracy |
| MA | Method and accuracy |
| E | Explanation |

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| --- |
| **QUESTION 1** |
|  | 1.1.1 | 250 ml | **L2** | **1C** |
|  | 1.1.2 | **ºC =** $\frac{5}{9}$**(º450 - 32º)**= 232.22≈ 232ºC | **L2** | **1SF****1C** |
|  | 1.1.3 | 121.52 g x 2=243.04≈ 243 g | **L1** | **1M****1A** |
| 1.2 | 65 ÷ 2  = 32.5 mm | **L1** | **2C** |
| 1.3 | **Flour**121.52 g x 3= 364.56≈ 365g | **2C** | **Milk**250 x 3= 750 ml | **L2** | **2C** |
| 1.4 | 15 x 3= 45 minutes | **L2** | **1M****1A** |
| 1.5 | Area = Length x BreadthA = 1.2 m x 2.3 m A = 2.76 m2 | **L2** | **1M****2A** |
| 1.6 | $$V=πr^{2}h$$V = 3.142 x 11.52 x 40cm V = 16 621.18 cm3 | **L2** | **1SF****1M****1A** |
|  |  |  |  |
| **QUESTION 2** |
| 2.1 | Madagascar  | **L1** | **2A** |
| 2.2 | 2cm = 300km1cm = 150km1:150 | **L2** | **1A****1CA****1A** |
| 2.3 | 1cm on the map represents/is equal to 150km in reality  | **L1** | **2E** |
| 2.4 | Antananarivo  | **L1** | **2A** |
| 2.5 | North East  | **L1** | **2A** |
| 2.6 | Indian Ocean  | **L1** | **2A** |
| 2.7 | $$Speed= \frac{Distance}{Time}$$$S= \frac{162 km}{2 hours}$S = 81 km/h | **L2** | **1SF****1A** |
| 2.8 | $\frac{8 litres}{100 km}$= 0.08 liters/km= 0.08 x 162= 12.96 liters≈ 13 liters of fuel | **L2** | **1MA****1M****1A** |
| 2.9 | R15 000 x 259.79= 3 896 850 Malagasy Ariary | **L2** | **1M****1A** |
|  |  |  |  |  |
| **QUESTION 3** |
| 3.1 | Break even point. This is the point where he doesn’t make a profit or a loss. | **L1** | **1A****1E** |
| 3.2 | Direct proportion. The more hot dogs he sells the higher his expenses will be. | **L1** | **2E** |
| 3.3 | Marius has R350 fixed expenses. He has to pay rental even if he doesn’t sell any hot dogs. | **L1** | **2E** |
| 3.4 | Rolls R5.70 for 6 rollsVienna sausages R47.00 for 20 sausagesTomato sauce R20.00 for 2 liters. | **L1** | **3A** |
| 3.5 | R350 x 3= R1 050= R1 050 x 4= R4 200 | **L2** | **1A****1CA** |
| 3.6 | Accept 92 - 93 | **L1** | **2A** |
| 3.7 | 25 Hot dogs | **L3** | **2A** |
| 3.8 | Accept 40 – 45 | **L3** | **2A** |
|  |  |  |  |
| **QUESTION 4** |
|  | 4.1.1 | Simple interest, is where interest will only be calculated once on the original amount and then multiplied with the number of years, Compound interest is where interest is calculated every time on the new amount for that year.  | **L1** | **2A** |
|  | 4.1.2 |  | **L2** | **2M****2A** |
|  | 4.1.3 | R6 090,93 - 5 000=R1090,93 | **L2** | **2M****1A** |
|  | 4.2.1 | R6 999 x 15%R1 049.85 | **L2** | **1M****1A** |
|  | 4.2.2 | R6 999 – R1 049.85R5 949.15 | **L1** | **1M****1A** |
|  | 4.2.3 | R5 949.15(1+ 0.078 x 3)R7 341.25R7 341.25 + R1 049.85R8 391.10 | **L2** | **1SF****2MA** |
|  | 4.2.4 | R8 391.10 – R6 999R1392.10 | **L2** | **1M****1A** |
|  | 4.2.5 | R10.00 | **L1** | **1A** |