

**MATHEMATICS MEMO**

**JUNE 2016**

**GRADE 7**

60 MARKS

Time: 1 hour 30 minutes

Marks: 60

This MEMO consists of 5 pages

**Important Information**

* This is marking guideline. In instances where learners have used different

Mathematically sound strategies to solve the problems, they (learners)

should be credited.

* Underline errors committed by learners and apply Consistent Accuracy ( CA )

marking.

|  |  |
| --- | --- |
| **KEY** | |
| M | Method mark |
| CA | Consistent Accuracy mark |
| A | Accuracy mark |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 1.1 | B | 1.2 | C | 1.3 | B | 1.4 | B | 1.5 | C | Give 1 mark for each correct answer. | 5 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Ques. | Solution | | Mark Allocation | | Total | |
| **QUESTION 2 [7 Marks]** | | | | | | |
| 2.1.1 | | **✓M**  **✓A**  Or  **✓M**  **✓A** | | Method :1 mark  Answer :1 mark | | 2 |
| 2.1.2 | | **✓✓M**  = **✓CA** | | : 1 mark  : 1 mark  Answer :1 mark | | 3 |
| 2.1.3 | | **✓M**  **✓M**  or **✓CA**  or  **✓M** **✓ M**  or **✓CA**  or  **✓✓M**  or **✓CA** | | : 1 mark  :1 mark  Answer:1 mark  Or  : 1 mark  : 1 mark  Answer:1 mark  Or  1: 1 mark  : 1 mark  Answer:1 mark | | 3 |
| 2.1.4 | | **or ✓✓** | | : 1 mark  or 0,05 : 1 mark | | 2 |
| 2.1.5 | | **✓M**  **✓** | | 6: 1 mark  1:1 mark  Answer only: 1 mark | | 3 |
| 2.2.1 | | 0,03 0.3 | | : 1 mark | | 1 |
| 2.2.2 | |  | | : 1 mark | | 1 |
| 2.3.1 | | 2 cups of flour makes 25 cup cakes  4 cups of flour will make 50 cup cakes | | Answer:1 mark | | 1 |
| 2.3.2 | | 2 dozens = 24 eggs **✓A**  2 eggs 25 cup cakes  24 eggs 300 cup cakes**✓A** | | eggs: 1 mark  cup-cakes: 1 mark | | 2 |
| 2.3.3 | | How much butter will be needed if 2 dozen eggs are used  125 g 12 1500g **✓** | | Answer : 1 mark | | 1 |
| 2.4 | | **✓M**  **✓M**  **✓CA**  Or  **✓M**  **✓M**  **✓CA** | | : 1 mark  : 1 mark  Answer: 1 mark  Or  : 1mark  : 1 mark  Answer: 1 mark | | 3 |
| **QUESTION 3 [13Marks]** | | | | | | |
| 3.1.1 | | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | Input | 1 | 2 | 3 | 4 | 5 |  | m | | Output | 4 | 7 | 10 | **13** | **16** |  | **25** | |  |  |  |  | **✓A** | **✓A** |  |  | | | 13: 1 mark  16: 1 mark | | (2) |
| 3.1.2 | | 25= 3m +1 **✓✓**  25-1 = 3m  24 = 3m  m= 8**✓** | | 3m: 1 mark  1: 1mark  Answer : 1 mark | | 3 |
| 3.1.2 | | Input value multiplied by 3 add 1 or Add 3 or 3 or each pattern is 3 more than the previous one**✓A** | | Correct description:1 mark | | (1) |
| 3.2 | | 4**✓**  5**✓**  5  4  3-2 **✓**  3k-2 | | 4: 1 mark  5: 1 mark  3-2: 1 mark | | (3) |
| **QUESTION 4 [4] Marks]** | | | | | | |
| 4.1.1 | | QR and XY **✓A** | | Answer : 1 mark | | (1) |
| 4.2.1 | | 4.2.1 Circumference **✓ A**  4.2.2 Radius **✓ A**  4.2.3 Diameter **✓ A** | | 1 mark for each correct answer | | (3) |
|  | |  | |  | |  |
| **QUESTION 5 [4] Marks]** | | | | | | |
|  | |  | |  | |  |
| 5.1.1 | | KLM**✓A** | | Answer:1 mark  No mark if order not considered | | (1) |
| 5.2.1 | | 90**✓A** | | Answer: 1 mark | | (1) |
| 5.3.1 | | **✓A** | | Answer: 1 mark | | (1) |
| 5.3.2 | | **✓A** Each interior angle of an equilateral triangle is equal to 60° **✓** | | **✓:** 1 mark  Reason: 1 mark | | (2) |
| **QUESTION 6 [14 marks]** | | | | | | |
| 6.1 | | **✓A** | | Answer: 1 mark | | (1) |
| 6.2.1 | | Area of ABCD**✓M**  **✓M**  **✓CA** | | Formula:1 mark  Substitution :1 mark  Answer: 1 mark | | (3) |
| 6.2.2 | | Area of∆𝐴𝐷𝐸**✓M**  **✓M**  **✓CA** | | Formula:1 mark  Substitution :1 mark  Answer: 1 mark | | (3) |
| 6.2.3 | | Area of 𝐴𝐵𝐶𝐸= Area of Area of∆𝐴𝐷𝐸  **✓M**  **✓CA** | | : 1 mark  Answer: 1 mark | | 2 |
| 6.3 | | S.A =  **✓**  S.A =  **✓M**  **✓✓✓A**  **✓CA** | | Formulae : 1 mark  : 1 mark  : 1 mark  : 1 mark  : 1 mark  Answer: 1 mark | | 6 |
|  | | **TOTAL=60** | | | |  |