

MATHEMATICS

MEMORANDUM

# 2014

# SCHOOL BASED ASSESSMENT TASK

# MARKS: 50

# WEIGHTED MARK: 10

# SUGGESTED TIME: 1 hour

# TERM 1: Investigation

**INVESTIGATION**

**GRADE 7**

**TERM 1**

# ASSIGNMENT

**MARKS: 50**

**TIME: 1 hour**

**This memorandum consists of 5 pages**

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|  |

**Question 1:Whole numbers**

Calculate without using a calculator

* 1. 24 502 1 mark for 60 (2)

+ 35 798 1 mark for 300

60 300🗸🗸

* 1. 320 000 1 mark for 86 (2)

233 567 1 mark for 433

86 433 🗸🗸

* 1. 378 45 (3)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | 3 | 7 | 8 |  |
|  | x |  | 4 | 5 |  |
|  | 1 | 8 | 9 | 0 | 🗸 |
| 1 | 5 | 1 | 2 | 0 | 🗸 |
| 1 | 7 | 0 | 1 | 0 | 🗸 |

* 1. 6 251 7 (3)

893 ✓

7 6 251

- 56

65 ✓

- 63

21

-21 ✓

0 [10]

**Question 2: Whole numbers**

2.1. Fill in between the following numbers:

2.1.1. 198 765 110 198 675 011 🗸 (1)

2.1.2. 694 000 201 794 001 345 🗸 (1)

2.1.3. 240 345 240 345 🗸 (1)

2.2. Arrange the following numbers in descending order( from the biggest to the smallest)

899 888 898; 102 278 001; 99 999 999; 9 876 653; 463 499🗸🗸 (2)

2.3. Round these numbers to the:

2.3.1. 54 ( nearest 10): 50 🗸 (1)

2.3.2. 452 (nearest 100): 500 🗸 (1)

2.3.3. 58 453 (nearest 1000): 58 000 🗸 (1)

2.4. Complete

2.4.1. If 52 + 37 = 89, then 37 + 52 = **89** 🗸 (1)

2.4.2. If 88 + 49 = 137 , then 137 49 = **88** 🗸 and 137 88 = **49** 🗸 (2)

2.4.3. If 15 + (7 + 8) = 30, then (15 + 7) + 8 = **30** 🗸 (1)

2.4.4. If 3 (4 2) = 24, then (3 4) 2 = **24** 🗸 (1)

2.5. Mr Mohapi sells your school 500 chairs for R22 500. Mrs Shuma sells your school 200 chairs for R9 600. Show by calculations who sell cheaper chairs? (3)

R22 500 500 = R45 per chair 🗸

R9 600 200 = R48 per chair 🗸

Mr Mohapi sells cheaper chairs. 🗸

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**Question 3: Factors and Multiples**

3.1. List down:

3.1.1. All factors of 24 (2)

F24  = { 1 ; 2 ; 3 ; 4 ; 6 ; 8 ; 12 ;24} 🗸 🗸 2 marks for all correct factors

1 mark for 5 – 7 correct factors

No marks for less than 5 factors

3.1.2. Which of the factors above are prime factors? (1)

Prime factors= {2 and 3} 🗸

3.2. Find the highest common factor(HCF) of 18 and 24 (3)

F18 = { 1 ; 2 ; 3 ; 6 ; 9 ; 18 } 🗸

F24  = { 1 ; 2 ; 3 ; 4 ; 6 ; 8 ; 12 ;24} 🗸

HCF of 18 and 24 = 6 🗸

3.3. Find the lowest common multiple(LCM) of 6 and 9 (3)

M6 = { 6; 12 ; 18 ; 24; 30 ; 36 ; 42 ; 48 ; 54; 60} 🗸

M9  = { 9 ; 18 ; 27 ; 36 ; 45 ; 54 ; 63 ; 72 ; 81 ; 90} 🗸

LCM of 6 and 9 = 18 🗸

**[9]**

**Question 4: Ratio, Rate and Finance**

4.1. Write the following ratio in its simplest form (1)

24 : 32

= 3 : 4 🗸

4.2. In a class of 35 learners, the ratio of boys to girls is 3: 4. Calculate how many girls are there in the class. (2)

Sum of the ratios = 3 + 4 OR

= 7

Number of girls = 5 4 🗸

Number of girls = 🗸 = 20 🗸

= 20 🗸

4.3. A car travels a distance of 480 km in 4 hours. Calculate the speed of the car. (3)

🗸

🗸

4.4. A dress cost R800. I get 20% discount. How much do I pay? (2)

Discount amount = 20% of R800 OR New price = 80% of R800

= = 🗸

= R 160 🗸 = R640 🗸

New price = cost price discount

= R800 R160

= R640 🗸

**[8]**

**Question 5: Exponents**

5.1.Write the following in exponential form (1)

3 x 3 x 3 x 3 x 3 x 3 = 🗸

5.2. Write the following in expanded form (1)

= **4 x 4 x 4** 🗸

5.3. Calculate

5.3.1. (2)

🗸

🗸

5.3.2. 4 (3)

2🗸 4

9 🗸

🗸

[7]

The End