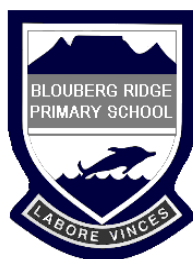| **Blouberg Ridge Primary School**		
Mathematics		**Marker: P. Swanepoel**
Marking Guideline		**Grade 6**
Date: 1 July 2021		**Time allocation: 1 hour**
Examiner: P. Swanepoel		**Moderator: ………………….**
Task 4: Test		**Total: 40 marks**

Question 1:   [KNOWLEDGE]   [14 marks]

1.1)   Arrange the following numbers <u>from biggest to smallest</u>:   (1)

123 231 ; 45 001 ; 5 2 11 ; 772 441 ; 46 020 ; 76 123

772 441 ; 123 231 ; 76 123 ; 46 020 ; 45 001 ; 5 211 ✓ (all values in order)

1.2)   Determine the Highest Common Factor (HCF) of 24 and 36.   (3)

F 24: 1;2;3;4;6;8;12;24 ✓   (must contain all factors)

F 36: 1;2;3;4;6;9;12;18;36 ✓   HCF = 12 ✓

1.3)   Determine the <u>prime factors</u> of 56.   (1)

PF 56 = 2 and 7 ✓ (must contain both PF's)

1.4)   Find the Lowest Common Multiple (LCM) of 9 and 12   (3)

M 9: 9;18;27;36;48;56… ✓   M 12: 12;24;36;48;60;72… ✓   LCM = 36 ✓

1.5)   Write the following fractions in their <u>simplest form</u>:   (2)

a.) $\frac{14}{20} = \frac{7}{10}$ ✓   b.) $\frac{18}{5} = 3\frac{3}{5}$ ✓

1.6)   Compare the following fractions by filling in <; > or = :   (2)

a.) $\frac{5}{8}$ = ✓ $\frac{10}{16}$ b.) $\frac{5}{6}$ > ✓ $\frac{4}{5}$

1.7)   Fill in the missing value for the following <u>equivalent fractions</u>:   (2)

a.) $\frac{8}{16} = \frac{1}{\square}$ Answer: **2** ✓   b.) $\frac{4}{9} = \frac{\square}{27}$ Answer: **12** ✓

Question 2   [COMPLEX PROCEDURE]   [4 marks]

2.1)   Use the table below to answer the following:

Input	1	2	3	4		15	**20** ✓
Output	9	16	23	30		**107** ✓	142

a.) Describe the pattern: **+ 7 / adding 7** ✓   (1)

b.) Determine the rule for this number pattern.   **X 7 + 2** ✓   (1)

C.) Complete the table by filling in the missing values.   (2)

Question 3   [ROUTINE PROCEDURE]   [14 marks]

3.1) Calculate the following:

a.) 143 007 + 3 178 + 21 119   (1)   b.) 87 078 – 6 667 – 1 559   (2)

167 304 ✓	87 078 – 6 667= **80 411** ✓ 80 411 – 1559 = **78 852** ✓ **or** 87 078 – **8226 = 78 852**

c.) 7 693 x 284   (4)   d.) 3 676 ÷ 18   (2)

   Suitable method (Vertical column/

             Lattice)   18/ 3 676

   * Product lines: (7 693 x 4) **30 772** ✓   **- 36** ✓

                 (7 693 x 80) **615 440**   ..7

                 (7 693 x 200) **1 538 600** ✓   **- 0**

                 (all correct)   76

   * Answer: 2 184 812 ✓   - 72

                                                              4   **Answer= 204 r.4** ✓

e.) $3\frac{1}{4} + 1\frac{1}{2}$ (2)   f.) $2\frac{1}{12} - 1\frac{2}{3}$ (2)

LCD = 4 ✓   **LCD = 12** ✓

Answer: $4\frac{3}{4}$ ✓   **Answer = $\frac{5}{12}$** ✓

g.) $\frac{7}{8}$ of 64 $= \mathbf{56}$ ✓ (1)

Question 4 [COMPLEX PROCEDURE]   **[4 marks]**

4.1) A traveller went on a three-day road trip in his car. The table shows the various distances he travelled per day:

	Day 1	Day 2	Day 3
Distance travelled over 3 days.	256 km	Double the distance of Day 1.	12 km less than the Distance of Day 1.

Calculate the total distance travelled over the three days.

256 km ✓ **+ 512 km** ✓ **+ 244 km** ✓ **= 1 012 km** ✓

Question 5: [PROBLEM SOLVING]   **[4 marks]**

5.1) Julien saved money to buy a new skateboard which costs R800. His dad agreed to pay $\frac{3}{8}$ of the price and Julien pays the rest. How much will Julian have to pay for the skateboard?

N: **R800 −** ✓ **($\frac{3}{8}$ of $R800$)** ✓   **or** $\frac{5}{8}$ ✓of $R800$ ✓

W: **any suitable calculations- must reflect 300** ✓ **/ 800 ÷8 = 100** ✓

A: Julien must pay **R500** ✓