Blouberg Ridge Primary School
Grade 7
Mathematics
Paper 1
Mid-Year Examination 2019
Marking Guidelines

Question 1: Underline the correct answer. Only one answer is correct. **[10]**

1.1   Calculate $1\,400 \div 70$ **(K)**

a)   200   b)   20

c)   2   d)   28

1.2   The 7th prime number is **(K)**

a)   19   b)   13

c)   17   d)   11

1.3 $2^3 + (2 + 2)^2$ **(RP)**

a)   36   b)   24
c)   25   d)   16

1.4 $5^3 - 3^2$ **(RP)**

a)   27   b)   6

c)   9   d)   116

1.5   Ten million six hundred and nine thousand and fifteen = **(K)**

a)   1 690 015   b)   10 069 015

c)   10 609 015   d)   10 609 150

1.6   BODMAS: $35 - 7 \times 4 \div 2 + 11$ **(RP)**

a)   32   b)   67

c)   36   d)   14,5

1.7 $\sqrt{64 + 36}$ **(RP)**

   a)   9   b)   14

   c)   100   <u>d)   10</u>

1.8   Simplify this ratio 12:36   **(RP)**

   a)   12:18   b)   6:9

   <u>c)   1:3</u>   d)   3:4

1.9   0,8 written as a common fraction in its simplest form is: **(K)**

   a) $\frac{8}{10}$ b) $\frac{3}{4}$

   <u>c)</u> $\frac{4}{5}$ d) $\frac{80}{100}$

1.10   0,06 x 100   **(K)**

   <u>a)   6</u>   b)   0,6

   c)   0,06   d)   60

Question 2:

Fill in < or > or =   **[8]**

2.1   25 % ____=____ $\frac{1}{4}$ **(K)**

2.2   88,008 ____<___ 88,8   **(K)**

2.3   436 207 ____ > ___ 432 607   **(K)**

2.4   Determine the LCM of 12 and 16.   **48**   **(RP)**

2.5   What is the HCF of 32 and 48?   **16**   **(RP)**

2.6   Write 140 as a product of its prime factors.   **2 x 2 x 5 x 7**   **(RP)**

2.7   Write your answer to 2.6 in exponential form.   **2^2 x 5 x 7** **(RP)**

2.8   Calculate: 9 + (2 + 5) x 3^3 ÷ 9   **30**   **(RP)**

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Question 3: **[8]**

3.1 Round 4,825 off to the nearest

a) whole number   **5**   **(K)**

b) tenth   **4,8**   **(K)**

c) hundredth   **4,83**   **(K)**

3.2 Calculate

3.2.1   **6 587 688 + 433 947   (RP)** [1]   3.2.2   **4 232 000 – 189 975 (RP)** [1]

7 021 635 ✓

4 042 025 ✓

3.2.3   **12,428 + 34,265 + 1,7   (RP)** [1]   3.2.4   **1,59 x 8, 2   (RP)** [2]

(Round your answer off to 2 decimal places)

48, 393 ✓

13, 038 ✓

13,04 ✓

3

Question 4: Calculate and write your answer in its simplest form. [8]

4.1 $3\frac{3}{4} + 2\frac{1}{3} - 1\frac{5}{12}$ [4] **(RP)**   4.2 $1\frac{2}{5} \times 2\frac{2}{6} \times 2\frac{4}{7}$ **(RP)** [4]

$4\checkmark + \frac{3}{4} + \frac{1}{3} - \frac{5}{12}$ **OR** $\quad \frac{15}{4} + \frac{7}{3} - \frac{17}{5}\checkmark$	$\frac{7}{5} \times \frac{14}{6} \times \frac{18}{7}$ **(convert to improper)** $\checkmark$
$4 + \frac{9}{12} + \frac{4}{12} - \frac{5}{12}\checkmark \qquad \frac{225}{60} + \frac{140}{60} - \frac{85}{60}\checkmark$	**Working/cross cancelling** $\checkmark$
(changed to common denominator)	$\frac{42}{5}\checkmark$
$4 + \frac{8}{12}\checkmark \qquad\qquad\qquad \frac{14}{3}\qquad \checkmark$	$8\frac{2}{5}\checkmark$
$4\frac{2}{3}\checkmark \qquad\qquad\qquad\quad 4\frac{2}{3}\checkmark$	

Question 5: Complete the table below. Write your answer in its simplest form. **(K)** [3]

PERCENTAGE	DECIMAL FRACTION	COMMON FRACTION
26%	5.1_____**0,26**____	$\frac{13}{50}$
5.2____**20%**_____	0,2	$\frac{1}{5}$
67%	0,67	5.3_____$\frac{67}{100}$_____

Question 6: Complete the following: **(1)** [1]

$3 \rightarrow \boxed{\times \frac{1}{4}} \longrightarrow \boxed{+\frac{1}{2}} \longrightarrow \boxed{1\frac{1}{4} \text{ or } \frac{5}{4}}$

4
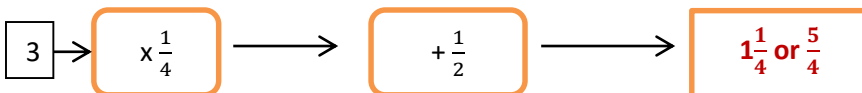
Question 7: Problem Solving. Show all working. [12]

7.1 Mr Legodi wants to buy a TV that costs R3 000. A discount of 15% is offered for a cash payment only. How much will he pay for the TV if he buys it using cash. **CP** (3)

$\frac{15}{100}$ **x R3 000** **R3 000 −R450✓ = R2 550 ✓**

R450 ✓

7.2 Share the bill for lunch between Melrose, Halle and Thandi in the ratio 3: 1: 2. The total is R540. (4)

3: 1: 2 **R90 x 3 = R270 ✓** **CP**

540 ÷ 6 = 90✓ **R90 x 1 = R90✓**

R90 x 2 = R180✓

7.3 Calculate the percentage increase if a bag of sugar is increased from R40 to R48. (2)

48 − 40 = 8 **RP**

$\frac{8}{40}$ **x** $\frac{100}{1}$ **✓**

20%✓

7.4 If there are 3 600 entrants in a marathon race and $\frac{2}{3}$ have run this race before.

7.4.1 What is the number of entrants entering for the first time? (2)

$\frac{2}{3}$ **of 3 600** **OR** $\frac{1}{3}$ **of 3 600 ✓** **CP**

$\frac{2}{3}$ **x** $\frac{3600}{1}$ **1200✓**

2 400✓ 3 600 − 2 400 = 1200✓

7.4.2 If 450 runners could not finish the race, what is the fraction (in its simplest from) of these

$\frac{1}{8}$ **(K)** (1)

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