



eduresourcza.com



LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

VHEMBE WEST DISTRICT

Liberty through knowledge

GRADE 8

MATHEMATICS

2023 TERM 1

COMMON TEST MEMORANDUM

MARKS: 50

IMPORTANT INFORMATION:

This is a marking guideline. In any instance where learners have used different but sound mathematical strategies to solve the problems, they should be credited.

This Memorandum consists of 4 pages including the cover page.

QUESTION 1

- 1.1. A ✓
 1.2. B ✓
 1.3. C ✓
 1.4. B ✓
 1.5. B ✓

[5]

- (1)
 (1)
 (1)
 (1)
 (1)

QUESTION 2

- 2.1. $2 \times 7 \times 13$ ✓ ✓ ✓

[14]

1 mark for each
prime factor

(3)

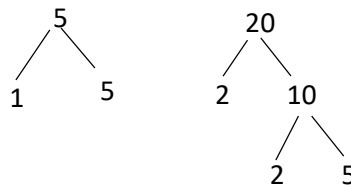
2.2.

OPTION 1

Multiples of:

5: 5; 10; 15; **20**; 2520: **20**; 40

Therefore 20 is the
LCM of 5 and 20

OPTION 2
factor tree

$$\begin{aligned}
 5 &= 5 \times 1 \\
 20 &= 2 \times 2 \times 5 \\
 \therefore \text{LCM} &= 5 \times 2 \times 2 \\
 &= 20
 \end{aligned}$$

OPTION 1

(1) multiples of 5
and multiples of
20 ✓

(1) choosing the
LCM of the two. ✓

OPTION 2

(1) factor tree of 5
and factor tree of 20

(1) product of all
prime factors

(2)

2.3.

OPTION 1

Factors of:

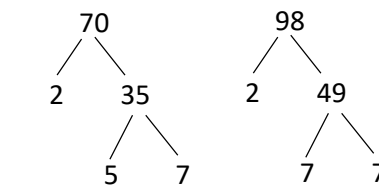
70: 1; 2; 5; 7; 10; **14**;

35; and 70.

98: 1; 2; 7; **14**; 49; and

98.

Therefore 14 is the
HCF of 70 and 98

OPTION 2

$$\begin{aligned}
 70 &= 2 \times 5 \times 7 \\
 98 &= 2 \times 7 \times 7 \\
 \therefore \text{HCF} &= 2 \times 7 = 14
 \end{aligned}$$

OPTION 1

(1) factors of 70 ✓

(1) factors of 98 ✓

(1) choosing the
HCF of the two. ✓

OPTION 2

(1) factor tree of 70
✓

(1) factor tree of
98 ✓

(1) product of
common prime
factors ✓

(3)

2.4.

Total parts: $3+2=5$

$$1 \text{ part} = \frac{50}{5} = 10$$

$$\begin{aligned}
 3 \text{ parts} &= 10 \times 3 \\
 &= 30
 \end{aligned}$$

$$\begin{aligned}
 2 \text{ parts} &= 10 \times 2 \\
 &= 20
 \end{aligned}$$

(1) Finding total
parts ✓

(1) Calculating 3
parts ✓

(1) Calculating 2
parts ✓

(3)

$$2.5. \quad R25\,000 \times \frac{22}{100} \checkmark \quad (3)$$

$$R25\,000 \times 1,22 \checkmark \\ = R30\,500 \checkmark$$

QUESTION 3

$$3.1.1. \quad 4 + (-22) \\ = 4 - 22 \\ = -18$$

$$3.1.2. \quad \text{OPTION 1} \\ 4[2 \times 6 + 3(-3)] \\ = 4[12 - 9] \\ = 4[3] \\ = 12$$

$$\text{OPTION 2} \\ 4[60 \div 5 + 3(-3)] \\ = 4[12 - 9] \\ = 4[3] \\ = 12$$

$$[13] \\ (1) - \times + = - \checkmark \\ (1) \text{ answer } \checkmark \quad (2)$$

$$(1) 2 \times 30 \checkmark \\ (1) -12 \div 4 \checkmark \\ (1) 60 \div 5 \checkmark \\ (1) \text{ Answer } \checkmark \quad (4)$$

$$3.1.3 \quad 1 + 4 = 5$$

$$(1) 2^0 = 1 \checkmark \\ (1)$$

$$3.1.4 \quad \sqrt{9 + 16} \\ = \sqrt{25} \checkmark \\ = 5 \checkmark$$

$$(2)$$

$$3.2 \quad \begin{array}{r} 630 \\ 49 \overline{) 30\,870} \\ \underline{-294} \\ 147 \\ \underline{-147} \\ 00 \end{array}$$

$$(1) 308 \div 49 \checkmark \\ (1) 49 \times 6 \checkmark \\ (1) 308 - 294 \checkmark \\ (1) \text{ answer } \checkmark$$

$$\therefore 30\,870 \div 49 = 630 \quad (4)$$

QUESTION 4

$$4.1. \quad \frac{14}{28} = \frac{1}{2}$$

$$[8] \\ (1) \text{ Answer } \checkmark \\ (1)$$

$$4.2. \quad \frac{4}{3} \div \frac{3}{2}$$

$$(2) \text{ Answer } \checkmark \checkmark \\ (2)$$

$$\frac{4}{3} \times \frac{2}{3} \checkmark = \frac{8}{9} \checkmark$$

$$4.3. \quad \frac{4}{5} \times 20 \\ = \frac{4 \times 20}{5 \times 1}$$

$$(1) \frac{4}{5} \times 20 \checkmark \\ (1) \text{ answer } \checkmark$$

$$= \frac{80}{5}$$

$$= 16 \quad (2)$$

4.4. $150\,000 - 150\,000 \times \frac{15}{100}$

(1) $\frac{15}{100} \checkmark$

(1) $150\,000 \times \frac{15}{100} \checkmark$

(1) Answer $\checkmark$
(3)

QUESTION 5

5.1.1. 0.03×0.02
 $= 0.006$

[10]
(2) Answer $\checkmark \checkmark$

5.1.2. $\frac{0.36 \times 100}{0.2 \times 10}$
 $= \frac{36}{2}$
 $= 18$

(2)
(1) multiplying by
0.36 by 100 and 10
by 0.2
(1) simplifying
(1) answer
(3)

5.1.3. $(0.4)^2$
 $= 0.4 \times 0.4 \checkmark$
 $= 0.16 \checkmark$

(1) multiplying
(1) answer
(2)

5.2

$$\sqrt{0.01} = \sqrt{\frac{1}{100}} = \frac{1}{10}$$

$$\sqrt{\frac{1}{100}} \checkmark$$

$$= \frac{1}{10} \checkmark$$

$$= 0.1 \checkmark$$

TOTAL :50 MARKS