LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

SEKHUKHUNE SOUTH DISTRICT

GRADE 7

MATHEMATICS

CONTROLLED TEST 2

DATE : 07 June 2022
MARKS : 50
DURATION: $1\frac{1}{2}$ Hours

$\frac{\quad}{50}$

Learner: _____

School: _____

Instructions:

1. Read the questions carefully before answering.
2. Answer all questions in the spaces provided.
3. Write in blue or black ink only.
4. This paper consists of 6 (Six) pages including the cover page.

Question 1

1.1 Insert brackets in the following equation to make it true

$60 \div 3 + 5 \times 4 = 40$ (1)

1.2 Which of the following is/are NOT prime numbers? Circle them.

$2\,;\ 7\,;\ 3\,;\ 11\,;\ 9\,;\ 19$ (1)

1.3 Calculate the following. Show your working steps

(2)

1.3.1

$476\,006 - 197\,539$

1.3.2

9427×28

(2)

1.3.3

$6783 \div 23$

(3)

[9]

Question 2

Calculate the following

2.1 $2^5 \div 2^3 =$ _____ (2)

2.2

$\left(\sqrt[3]{27}\right)3 =$ _____

$=$ _____ (2)

2.3

$3^2 + \sqrt{25} =$ _____

$=$ _____ (2)

[6]

Question 3

3.1 Fill in $>, <$ *or* $=$, to make the statements true

$\frac{2}{10} \square \frac{200}{1000}$ (1)

3.2 Calculate

$3\frac{1}{3} - 2\frac{3}{4}$ (3)

3.3 The ratio of boys to girls at the party is 3:2. If there are 60 children at the party, how many girls are there?

(2)

3.4 The price of a school bag has increased from R200 to R250. Calculate the percentage increase in the price.

(3)

3.5 Convert the following common fraction into decimal fraction.

$\frac{1}{20} =$ _____ (1)

3.6 Calculate the following

$12{,}73 \times 3{,}13 =$

(3)

[13]

Question 4

4.1 Arrange the given the numbers in ascending order

$-8;\ 5;\ 0;\ -3;\ 2;\ 1$

_____ ; _____ ; _____ ; _____ ; _____ ; _____ (1)

4.2 Calculate:

4.2.1 $(+9) - (-5) =$

(2)

4.2.2 5.4.1 $(-15) \times (-2) =$ (2)

4.2.3 $24 \div (-6) =$ (2)

[8]

Question 5

5.1 Use the given sequence to answer the questions that follow

1 ; 2 ; 3 ; 5 ; 8 ; 13 ; …..

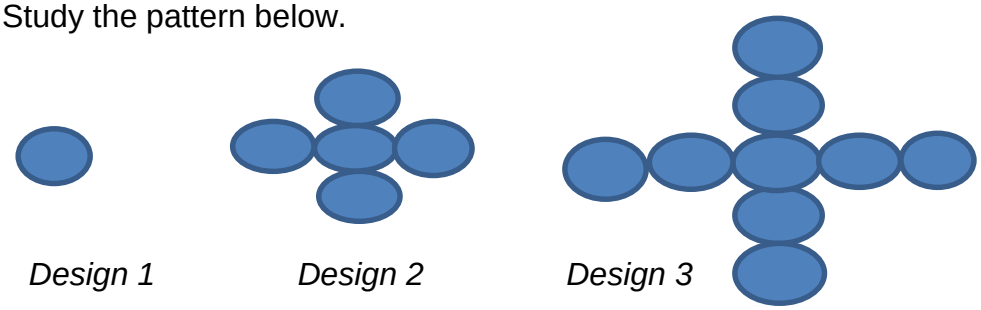
5.1.1 Give the next two terms in the number pattern. (2)

_____ ; _____

5.1.2 Describe how the sequence is extended. (2)

_____

5.2 Study the pattern below.



Design 1 *Design 2* *Design 3*

5.2.1 Write the general rule of the above pattern in words.

_____ (1)

5.2.2 Determine the number of circles in the 20th design by completing the statement below;

Design 1: 4(1) – 3 = 1
Design 2: 4(2) – 3 = 5
.
.
Design 20: _____ = _____ (2)

5.2.3 Complete the table below.

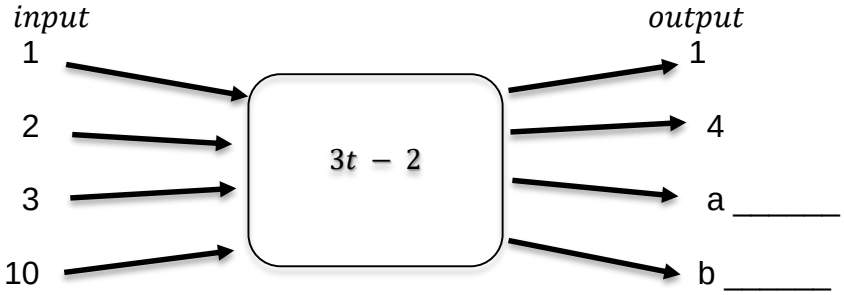
Design number	1	2	3	4	b_____
Number of circles	1	5	9	a_____	41

(2)

[8]

Question 6

6.1 Comlete the following flow diagram



(2)

6.2 6.2.1 Use the table below to determine the rule that describes the relationship between x and y.

x	10	11	12	13
y	16	17	18	19

(2)

$y =$ _____

6.2.2 Use the answer in 6.2.1 to answer the following;

When $x = 20$, calculate the value of y.

_____

_____

_____

(2)

[6]

TOTAL = 50