

NAME: Memo
 GRADE 7: _____
 PARENT SIGNATURE: _____

EXAMINER: MS. STAPLES
 SUBJECT HEAD: MS. STAPLES
 TOTAL MARKS: 50

INSTRUCTIONS:

1. Read the questions carefully.
2. Answer ALL the questions.
3. You may NOT use a calculator.
4. Write neatly.

Question 1: Whole numbers

1. Write this number in digits: Nine million sixty-one thousand, four hundred and thirty-eight. (1)

9 061 438 ✓

2. Compare using > ; < or =: (1)

2 563 930 < 2 653 940 ✓

3. Round off the following number to the nearest: 3 294 678 (3)

Nearest 5	Nearest 100	Nearest 1000
a. <u>3 294 680</u> ✓	b. <u>3 294 700</u> ✓	c. <u>3 295 000</u> ✓

4. Use the correct order of operations (BODMAS) to do the following calculations. (1)

a. $5 \times 7 - 45 \div 5 =$ 26 ✓

5. Calculate the following using any method: (2)

a. $9\,567 + 14\,708 + 829$

25 104 ✓

b. $5\,406 \times 187$

1 010 922 ✓

6. Find the lowest common multiple (LCM) of 6 and 11. (2)

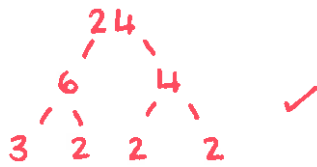
6; 12; 18; 24; 30; 36; 42; 48; 54; 60; 66 ✓

11; 22; 33; 44; 55; 66 ✓

LCM: 66 ✓

7. Write 24 as a product of its prime factors. Write your final answer in exponential form.

(2)



24 = $2^3 \times 3$ ✓

Question 2: Fractions and Percentages

1. Write 0,4 as a:

a. Percentage 40%.

(1)

b. A common fraction in its simplest form $\frac{2}{5}$ ✓

(1)

2. Compare using < or > or =

(1)

$\frac{5}{6}$ > $\frac{9}{12}$

3. Change the following improper fraction to a mixed fraction. $\frac{28}{3}$

(1)

$9\frac{1}{3}$

4. Simplify the following, show all your working out. Write your answers in its simplest form.

a. $2\frac{1}{4} + 1\frac{1}{2} - \frac{1}{3} =$

$(2+1) + \frac{3}{12} + \frac{6}{12} - \frac{4}{12}$ ✓

$3\frac{9}{12} - \frac{4}{12} = 3\frac{5}{12}$ ✓

(2)

b. $\frac{2}{6}$ of 24

$(24 \div 6) \times 2 = 8$ ✓

(1)

5. Joshua went to a restaurant and received 25% off his bill of R500 as it was his birthday. How much did he pay for his bill?

(3)

$25\% = \frac{25}{100}$ of 500 ✓

$= 125$ ✓

$R500 - R125 = R375$ ✓

Question 3: Decimal Fractions

1. Circle the greatest number in the block below.

(1)

0,085	8,770	0,870	8,750
7,780	8,88	7,8	

2. Round off the number 17,528 to:

a. The nearest whole number 18 ✓

(1)

b. One decimal place 17,5 ✓

(1)

c. Two decimal places 17,53 ✓

(1)

3. Calculate the following:

(2)

a. $5,12 \times 6,3 =$

$32,256 \checkmark$

b. $1\,476,83 - 297,97 =$

$1178,86 \checkmark$

4. Bunabile runs 8,2km each day, how far does he run in a week?

(1)

$8,2 \times 7 = 57,4 \text{ km each week} \checkmark$

Question 4: Rate and Ratio

1. Share the bill between Meishay and Naeem in the ratio 1:2. The total was R540.

(2)

$1+2=3$

$540 \div 3 = 180$

$180 \times 1 = 180$

$180 \times 2 = 360$

Meishay paid R180 $\checkmark$

Naeem paid R360 $\checkmark$

2. If a taxi travels 240km in 6 hours, how many kilometres does it travel in 1 hour?

(1)

$240 \div 6 = 40 \text{ km/hr} \checkmark$

Question 5: Exponents

1. Write the following in exponential form:

(2)

a. $8 \times 8 \times 8 \times 8 \times 8 = 8^5 \checkmark$

b. $p \times p \times p \times p \times p \times p \times p = p^7 \checkmark$

2. Write in expanded form and calculate:

(2)

a. $7^2 = 7 \times 7 \checkmark = 49 \checkmark$

b. $4^3 = 4 \times 4 \times 4 \checkmark = 64 \checkmark$

3. Calculate the following:

(3)

a. $\sqrt{30-5} = \sqrt{25} = 5 \checkmark$

b. $\sqrt[3]{125} = 5 \checkmark$

c. $5^2 + \sqrt{81} = 25 + 9 \checkmark = 34 \checkmark$

Question 6: Integers

1. Compare using $>$; $<$ or $=$

(1)

$-7 < -2 \checkmark$

2. Calculate the following:

(2)

a. $-3 + 8 = 5 \checkmark$

b. $-5 \times -6 = 30 \checkmark$

3. On Monday, Hannah borrowed R10 from her mother. On Tuesday, she borrowed another R15 from her mother. How much money does Hannah owe her mother? (Hint: remember the correct symbols) (2)

$$-R10 + (-R15) = -25 \checkmark$$

She owes her mother R25 $\checkmark$

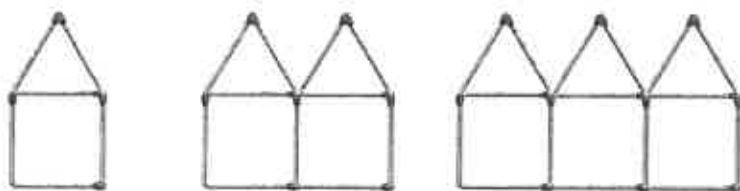
Question 7: Functions and relationships

1. Complete the next three terms in each sequence: (2)

a. -3; -2; -1; 0; 1; 2 $\checkmark$

b. 5; 6; 8; 11; 15; 20; 26; 33 $\checkmark$

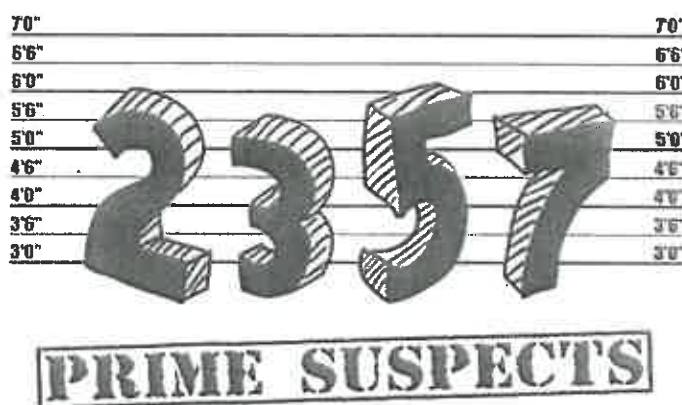
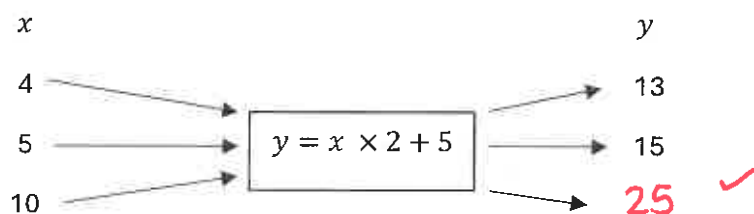
2. Look at the following pattern and answer the questions that follow.



- a. Fill in the missing information in the table below: (3)

Number of houses	1	2 $\checkmark$	4 $\checkmark$	n $\checkmark$
Number of matches	6	11	21	$n \times 5 + 1$ OR $5n + 1$

3. Complete the flow diagram using the general rule in the diagram: (1)



TOTAL: 50 MARKS