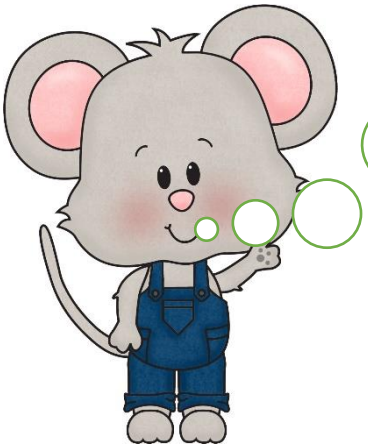
MEMO

TOM NEWBY SCHOOL EXAMINATION

Subject	**MATHEMATICS**	**Examiner**	**MRS R. VAN SCHALKWYK**
Date	**17 NOVEMBER 2017**	**Total marks**	**75**
Session	**1**	**Duration**	**2 HOUR**
Grade	**4**	**Moderator**	**MRS M. FOURIE**
Special instructions/ Equipment	**Read and answer ALL questions carefully. Good Luck. Think before you INK!**		
This assessment has been compiled using notes and information contained in the Tom Newby School resource material. The marking memorandum has been compiled accordingly. While alternative responses will be given due acknowledgement, the official memorandum will be considered a priority document to ensure uniformity of marking.			

Name:	Surname:	Class:

INSTRUCTIONS:



1. Read each question twice carefully.
2. Write all numbers neatly and clearly.
3. Show ALL calculations.
4. Check your work.
5. GOOD LUCK!

SECTION A WHOLE NUMBERS (33)

QUESTION 1

Calculate and fill in the answers.

a. The next odd number after 3 399 is

_____3 401 ✔ _____

b. Round 5 865 off to the nearest 100.

_____5 900 ✔ _____

c. Round 8 465 off to the nearest 1 000.

_____8 000 ✔ _____

d. Complete the number sentence below.

125 90 300

(5 x 25) + __175 ✔ ____ = (3 x 30) + 210

e. Expand the number 8 418:

(8 x _1 000_) + (4 x _100_) + (1 x 10_) + (8 x 1_) ✔

f. Double the number 4 905

_____9 810 ✔ _____

g. Halve the number 10 952 5 000+450+25+1

__5 476 ✔ _____

h. Write as a number: ten thousand two hundred and sixty-five

_____10 265 ✔ _____

i. Give the total number value of the underlined digits in 1<u>5</u> 8<u>1</u>9

_____5 010 ✔ _____

j. Make the biggest even number using all four digits : 0 5 8 3

_____8 530 ✔ _____

k. What are the factors of 12?

_____1,2,3,4,6,12 ✔ _____

l. What is the product of 15 and 20?

_____300 ✔ _____

(12)

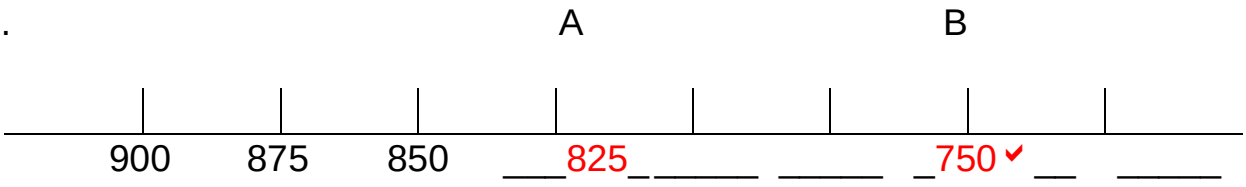
QUESTION 2

Fill in the missing numbers by completing the patterns, number line and spider diagram.

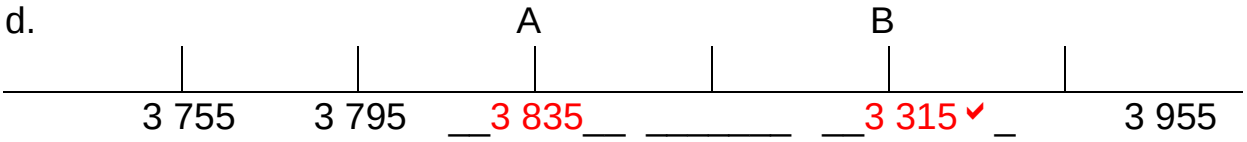
a. 4 590, 4 560, 4 530, _____4 500_____, _____4 470 ✔ ____

b. 7 060, 7 560, 8 060, _____8 560_____, _____9 060 ✔ _____

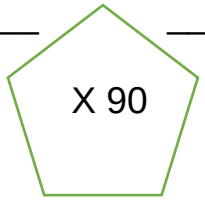
c.

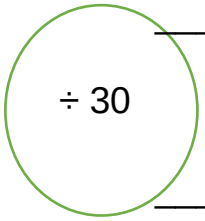


d.



e. 11 _____ ____ = ___990__ ____ ___330 ✔ _





40 _____ ____ = ___3 600__ ____ _1 200 ✔ ___

(6)

QUESTION 3

Check if the following calculation is correct. Remember you use the opposite operation to check your answer.

a. ACTUAL CALCULATION

$$6\overline{)656}$$

109 r 2

CHECKING

5

109 x 6 = 654 ✔

654 + 2 = 656 ✔

(2)

QUESTION 4

Calculate the answers. Show all the steps of the method you use and the answers clearly.

6 495 + 3 746 = a

$6^{1}4^{1}9^{1}5$
+3 7 4 6
10 241 ✔

(2)

8 491 – 5 565 = b

$8^{7}\ 4^{1}9^{8}1^{1}$
-5 5 6 5
2 926 ✔

(2)

92 x 15 = c

92
x 15
10
450 ✔
20
+ 900 ✔
1 380 ✔

92
x 15
460 ✔
+ 920 ✔
1 380 ✔

(2)

685 ÷ 7 = d

.97 r 6 ✔
7 685
- 63 ✔
455
49 ✔
6 ✔

(3)

QUESTION 5

Problem Solving. Remember to give an open number sentence and calculation.

a. Dad buys 3 DVD's for R95,50 each. How much did the DVD's cost?

R95,50 x 3 = R or adding ✔
$R9^{1}5^{1}$,50
X 3
R286.50 ✔

R90 x 3 = R270,00
R 5 x 3 = 15,00
50c x 3 = 1,50 ✔
R286.50 ✔

(3)

SECTION B **TIME AND FRACTIONS** **(14)**

QUESTION 1

Fill in >, < or =

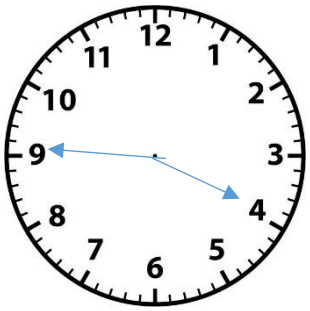
3½ hrs ___=___ 210 min 4 weeks ___<___ 30 days ✔

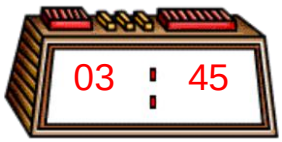
¼ day ____>__ 4 hrs 18 months ___=___ 1½ years ✔ (2)

QUESTION 2

Read and write the time shown on the clocks in digital and analogue time.

a.



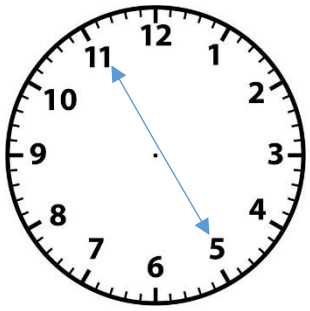


✔

a.m

____quarter to 4 ✔ ___

b.



✔

p.m

_twenty-five past eleven ✔ ___

(4)

QUESTION 3

Calculate the following answers:

a. A student attends school from 8 a.m to 2 p.m every day. How may hours does a student attend School per week?

_____30 hrs ✔ _____

8 to 2 = 6hrs
6 x 5 = 30

b. Peter is 10 years old. How old will he be in the year 2028?

_____21 years ✔ _____

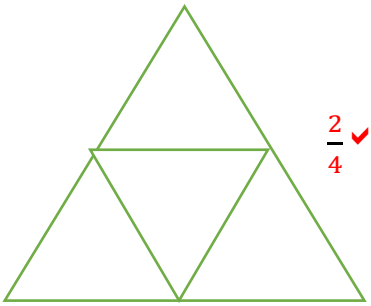
2 028 − 2 017 = 11

2 017 + 11 = 2 028

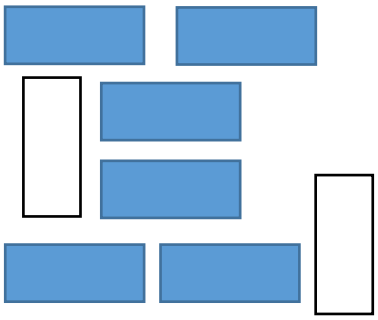
(2)

QUESTION 4

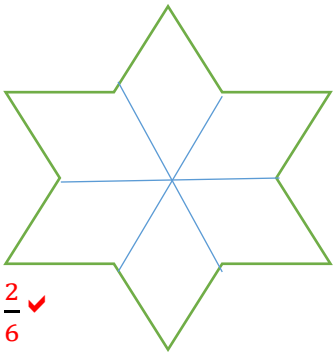
a. What fraction of each diagram is shaded in?



$\frac{2}{4}$ ✔



$\frac{6}{8}$ ✔



$\frac{2}{6}$ ✔

(1½)

b. Use the diagrams above to guide you and give an equivalent fraction for:

$\frac{3}{4} =$ $\frac{6}{8}$ ✔ $\frac{1}{3} =$ $\frac{2}{6}$ ✔ $\frac{1}{2} =$ $\frac{2}{4}$ ✔

(1½)

c. Calculate the following fractions.

$\frac{6}{8} + \frac{5}{8} =$ $\frac{11}{8}$ or $1\frac{3}{8}$ $\frac{7}{12} - \frac{4}{12} = \frac{3}{12}$ ✔ (1)

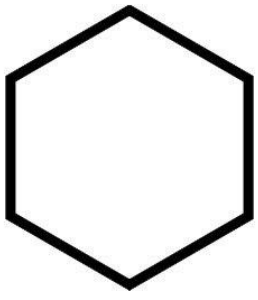
d. It takes ¾ of an hour to fix the leaking roof on our house. How many minutes is that? Please complete the open number sentence and calculation.

$\frac{3}{4}$ of 60 min = 45 min. ✔ ✔ (2)

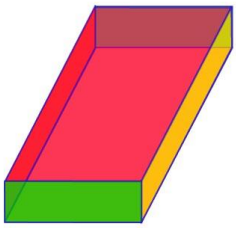
SECTION C GEOMETRY (10)

QUESTION 1

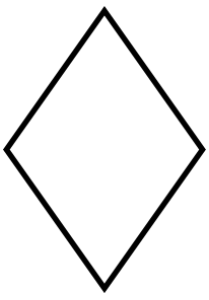
Name the shapes below:



Hexagon ✔



Rectangular prism ✔



Rhombus ✔

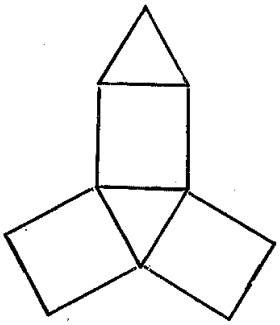
Cylinder ✔

(4)

QUESTION 2

If you cut out the net below, what shape would it make?

Underline the correct answers in each bracket.



This is a (2-D, 3-D) shape called a

(rectangular prism, triangular pyramid, ✔

Square pyramid, triangular prism)

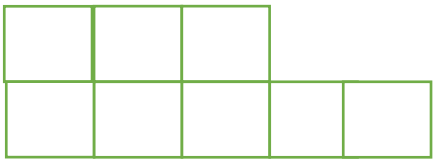
which has (3,4,5) faces and (4,5,6 ✔) vertices.

(2)

QUESTION 3

The plan below shows the floor of a hamster cage. What is the PERIMETER and AREA of the hamster cage?

Each block equals 1cm



Perimeter = __14 cm_ ✔ _____

Area = ___8 blocks_____

If the cage is five times bigger in real life, what is its real perimeter?

5 x 14 = 70cm

QUESTION 4

Look at the grid below and give the position of each of the following:

a. the kite b. the star c. the pentagon d. the trapezium

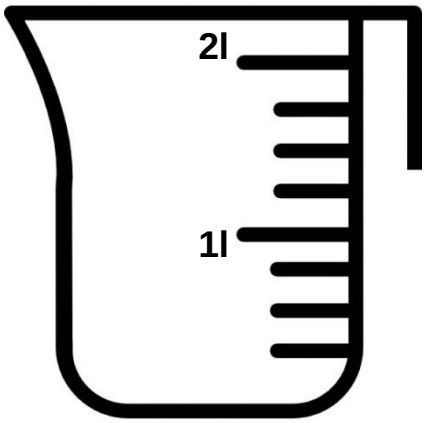
_H4___ __B4 ✔ __ __F5__ __A1 ✔ ___

	A	B	C	D	E	F	G	H	I
1									
2									
3									
4									
5									

QUESTION 1

Give the reading indicated by the arrows on each object and convert the amounts.

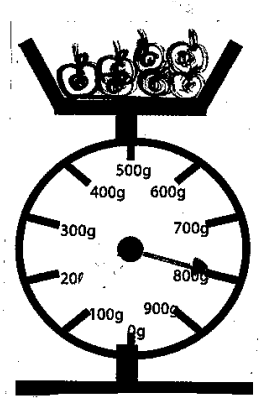
a.



1 500ml

1,5 l ✔

b.

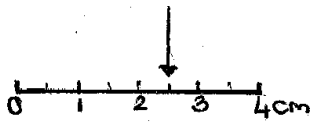


800 ✔ g

0.8 kg

or 0,800kg

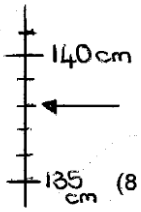
c.



25 ✔ mm

2,5 cm

d.



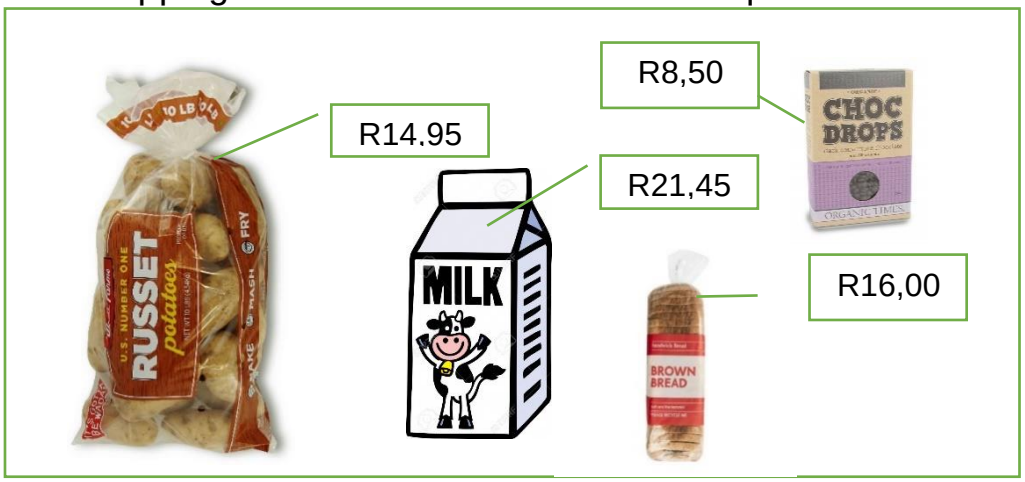
138 ✔ cm

1,38 m

(8 ÷ 2 = 4)

QUESTION 2

Study the shopping basket below and answer the questions which follow:



Ready to shop?

a. What would it cost for two packets of potatoes?

R14,95 x 2 = R29,90 (or add) ✔

b. What is the total amount you would pay for all the goods in the basket?

R14,95 + R21,45 + R16,00 + R8,50 = R60,90 ✔

c. If you paid with a R200 note. What would your change be?

$R^{1}2^{9}0^{9}0,^{1}00$

$-\quad 60,90$ ✔

$R\quad 139,10$

(3)

QUESTION 3

Study the picture below and complete the table.

Each bottle holds 1 litre of juice.

Capacity of bottles	Volume of bottles	Write volume as a fraction
5l ✔	3l 750ml ✔	$3\frac{3}{4}$ l ✔

(3)

SECTION E **DATA HANDLING** **(8)**

QUESTION 1

The table below compares the Grade 3 and Grade 4 learners' favourite games to play at break.

Games	Grade 3	Grade 4
Soccer	15	20
Netball	9	6
Skipping	8	10
Catches	18	12

a. How many learners from each Grade took part in this survey?

Grade 3 = 50 Grade 4 = 48 ✔

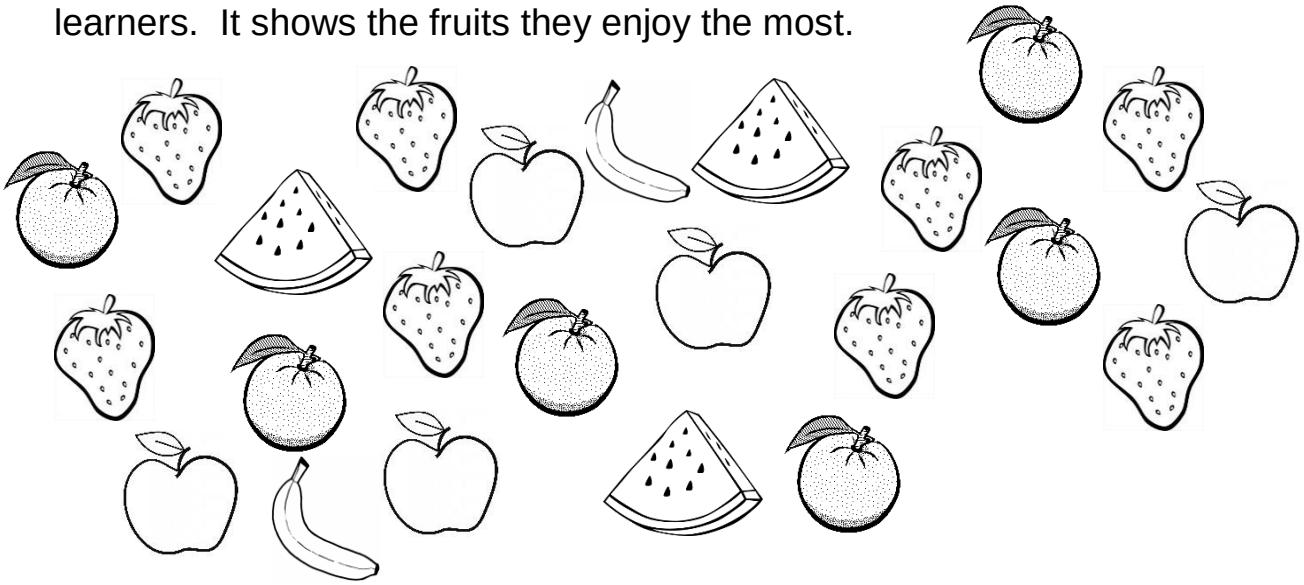
b. Which two games are the least popular in Grade 4?

Netball and Skipping ✔

(2)

QUESTION 2

The picture below shows the results of a survey done amongst Grade 0 learners. It shows the fruits they enjoy the most.



a. Tally the fruits enjoyed. (2½)

FRUIT	TALLY
Strawberries	8
Bananas	2
Oranges	6
Apples	5
Watermelons	3

b. Which fruit is enjoyed the most?

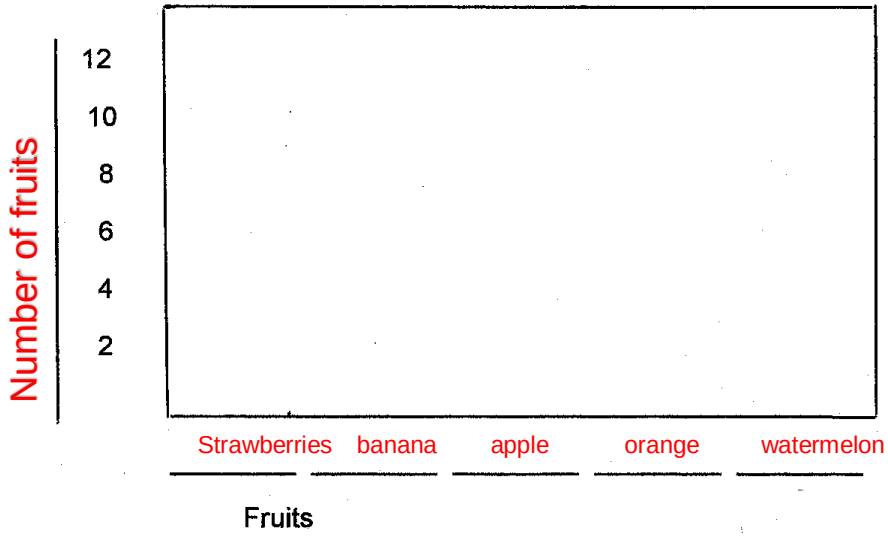
Strawberries

c. Which fruit is the least popular?

Banana (½)

d. Complete the **BAR GRAPH** for the survey done. (6 ÷ 2 = 3)

Favourite fruits (heading for graph)



TOTAL : 75