TOM NEWBY SCHOOL NOVEMBER EXAMINATION

MEMO

Subject	**Maths**	**Examiner**	**Mrs S. Naidoo**
Date	**17 November 2017**	**Total marks**	**75**
Session	**1**	**Duration**	**1 ½ hours**
Grade	**5**	**Moderator**	**Mrs M. Fourie**
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:

QUESTION 1:

Choose the correct answer from the given choices. Write down only the **letter** in the table at the end of this section.

1.1 There are _____ days in 4 weeks:

a) 4 b) 7 c) 20 d) 28

1.2 The highest common factor of 12 and 18 is:

a) 6 b) 2 c) 30 d) 216

1.3 The multiple of 9 between 108 and 126 is:

a) 18 b) 117 c) 118 d) 234

1.4 This value occurs most on a graph:

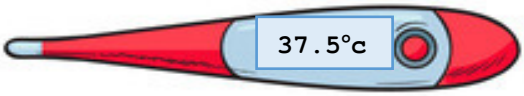
a) mean b) mode c) scale d) data

1.5 A square has _____ lines in symmetry.

a) 4 b) 2 c) 3 d) no

1.6 Round off the temperature on the thermometer to the nearest whole number:

a) 37℃ b) 40℃ c) 38℃ d) 380℃



1.7 A measuring cup measures _____ mℓ:

a) 250 mℓ b) 340 mℓ c) 500 mℓ d) 1000 mℓ

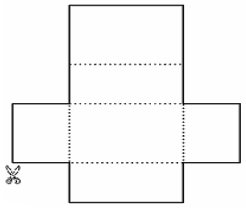
1.8 14 tons is equal to:

a) 1,4kg b) 140kg c) 1 400kg d) 14 000kg

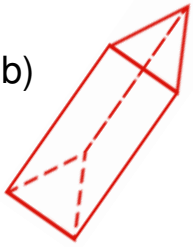
1.9 A square based pyramid has _____ triangles:

a) no b) 5 c) 3 d) 4

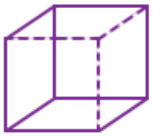
1.10 The following net matches diagram _____:



a) 

b) 

c) 

d) 

1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10
d ✓	**a ✓**	**b ✓**	**b ✓**	**a ✓**	**c ✓**	**a ✓**	**d ✓**	**d ✓**	**a ✓**

[10]

QUESTION 2:

Match column A with an answer from column B. Write down only the **letter** of your choice in the table.

COLUMN A		COLUMN B
2.1	Four thousand and sixty-two rounded off to the nearest 5 is	a. transformations b. 4 060 c. 4 065 d. 35 e. $\frac{27}{8}$ f. 7, 750 g g. P = 2(l + b) h. 7, 750 kg i. 9 j. P = 4 x S
2.2	Translation and Reflection are examples of	
2.3	The formula for the perimeter of a rectangle is ...	
2.4	$3\frac{1}{2}$ kg + $4\frac{1}{4}$ kg =	
2.5	$\frac{3}{8}$ of 24	

2.1	2.2	2.3	2.4	2.5
b ✓	**a ✓**	**g ✓**	**h ✓**	**i ✓**

[5]

QUESTION 3:

3.1 Sunshine Primary School recently held their Great Jump Fundraiser.

The number below represents the total amount collected on that day.

Study the number and answer the questions

Forty-two thousand, six hundred and eighty-three.

3.1.1 Rewrite the above number in digits: **42 683** ✓ (1)

3.1.2. Is this number odd or even? **odd** ✓ (1)

3.1.3 Give the next consecutive number: **42 684** ✓ (1)

3.1.4 Double the number in 3.1.1 : **85 366** ✓ (1)

3.2 Study the digits on the jerseys.

Use all the digits only once and make the:

3.2.1 largest possible number: **987 531** ✓ (1)

3.2.2 smallest possible number: **135 789** ✓ (1)

3.2.3 Round off the largest possible number to the nearest 100: **987 500** ✓ (1)

3.2.4 Round off the smallest possible number to the nearest 1000:

136 000 ✓ (1)

3.2.5 Find the difference between the largest and smallest possible number.

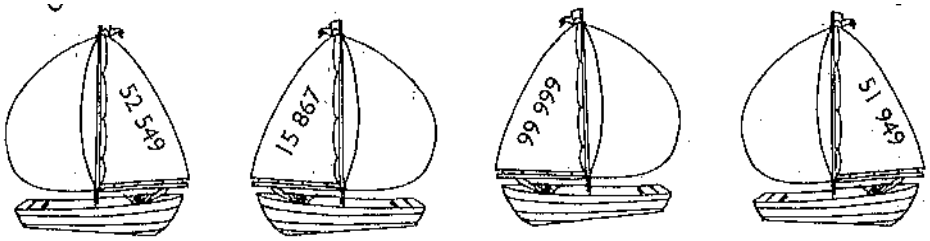
Show full calculations. (Use 3.2.1 and 3.2.2)

987 531

- 135 789

851 742 ✓ (1)

3.3. Arrange the numbers on the boats in ascending order:

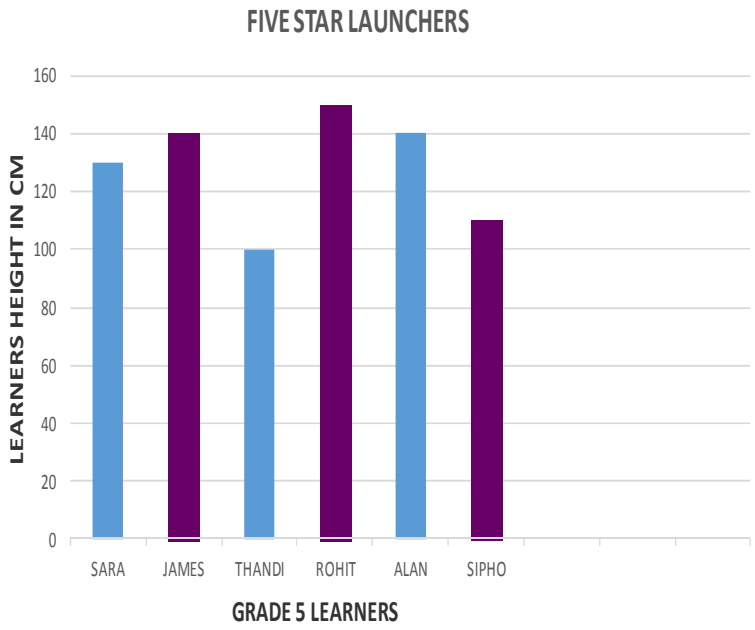


15 867 ✓, 51 949 ✓ , 52 549 ✓ , 99 999 ✓ (1)

[10]

QUESTIONS 4: Data Handling

The following graph represents some Grade 5 learners heights in cm. Only learners with a height above 110cm were allowed on the Rocket Launcher. Study the graph and answer the questions.



4.1 Who is the tallest of all the learners? Rohit ✓ (1)

4.2 Convert the tallest learners height to mm: 1 500 mm ✓ (1)

4.3 Who is the shortest of all the learners? Thandi✓ (1)

4.4 Convert the shortest learner's height to mm: 1 000 mm ✓ (1)

4.5 What is the difference in height between the tallest and shortest learner?

500mm / 50cm ✓ (1)

4.6 Which learner's height is equal to 1 meter? Thandi✓ (1)

4.7 Which learner's height is equal to 1.5 meters? Rohit ✓ (1)

4.8 State the mode of the graph: **140cm / 1400mm ✓** (1)

4.9 What is the total height (in cm) of all the learners? (2)

130cm

140

100 ✓

150

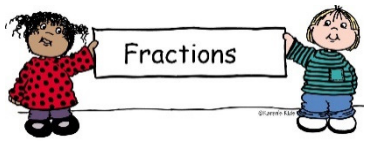
140

+110

770cm ✓

[10]

QUESTION 5:



5.1 Study the fractions below and choose two:

improper fractions: $\frac{26}{12}$ and $\frac{90}{15}$ or $\frac{15}{8}$ (1)

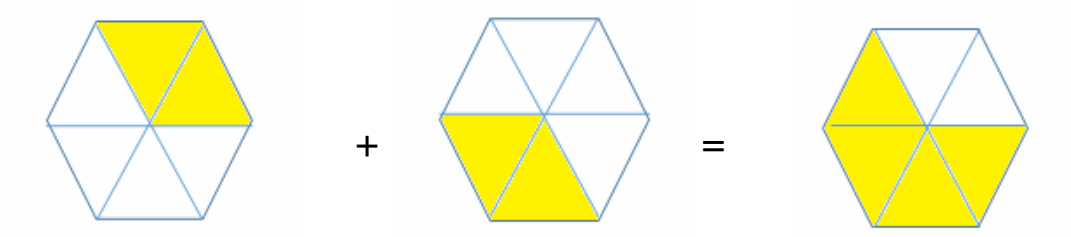
proper fractions: $\frac{4}{10}$ and $\frac{3}{9}$ (1)

mixed numbers: $3\frac{20}{30}$ and $8\frac{28}{42}$ or $1\frac{12}{15}$ (1)

$\frac{20}{30}$ $\frac{12}{15}$ $\frac{15}{8}$ $\frac{4}{10}$

$\frac{90}{15}$ $\frac{26}{12}$ $\frac{3}{9}$ $\frac{28}{42}$

5.2 Colour in the sum for the diagram below. Simplify your answer. (learner choice)



$\frac{2}{6}$ + $\frac{2}{6}$ = $\frac{4}{6}$ ✓ = $\frac{2}{3}$ ✓

5.3 Find:

$\frac{2}{4}$ of 16

= **(16 ÷ 4) x 2**

= **8 ✓** (1)

$\frac{3}{5}$ of 35

= **(35 ÷ 5) x 3**

= **21 ✓** (1)

5.4 Find the sum of the following mixed numbers. Simplify where possible.

$3\frac{6}{8} + 4\frac{4}{8}$

= **(3 + 4) + ($\frac{6}{8}$ + $\frac{4}{8}$)** or $\frac{30}{8} + \frac{36}{8}$

= **7 + $\frac{10}{8}$** = $\frac{66}{8}$

= **7 + 1$\frac{2}{8}$** = 8$\frac{2}{8}$

= **8$\frac{2}{8}$** = 8$\frac{1}{4}$

= **8$\frac{1}{4}$** (3)

$9\frac{10}{12} + 6\frac{9}{12}$

= **(9 + 6) + ($\frac{10}{12}$ + $\frac{9}{12}$)** or $\frac{118}{12} + \frac{81}{12}$

= **15 + $\frac{19}{12}$** = $\frac{199}{12}$

= **15 + 1$\frac{7}{12}$** = 16$\frac{7}{12}$

= **16$\frac{7}{12}$**

(2)

5.5 Find the difference. Simplify where possible.

$7\frac{3}{6} - 3\frac{5}{6}$

= **(7 - 3) + ($\frac{3}{6}$ - $\frac{5}{6}$)** or $\frac{45}{6} - \frac{23}{6}$

= **4 + $\frac{3}{6}$ - $\frac{5}{6}$** = $\frac{22}{6}$

= **3 + $\frac{6}{6}$ + $\frac{3}{6}$ - $\frac{5}{6}$** = 3$\frac{4}{6}$

= **3 + $\frac{9}{6}$ - $\frac{5}{6}$** = 3$\frac{2}{3}$

= **3$\frac{4}{6}$**

= **3$\frac{2}{3}$** (3)

$8\frac{2}{5} - 4\frac{4}{5}$

= **(8 - 4) + ($\frac{2}{5}$ - $\frac{4}{5}$)** or $\frac{42}{5} - \frac{24}{5}$

= **4 + $\frac{2}{5}$ - $\frac{4}{5}$** = $\frac{18}{5}$

= **3 + ($\frac{5}{5}$ + $\frac{2}{5}$) - $\frac{4}{5}$** = 3$\frac{3}{5}$

= **3 + $\frac{7}{5}$ - $\frac{4}{5}$**

= **3$\frac{3}{5}$** (2)

5.6 Convert the following improper fractions to mixed numbers.

$3\frac{1}{4}$ = $7\frac{3}{4}$ ✓ (1) $12\frac{3}{8}$ = $15\frac{3}{8}$ ✓ (1)

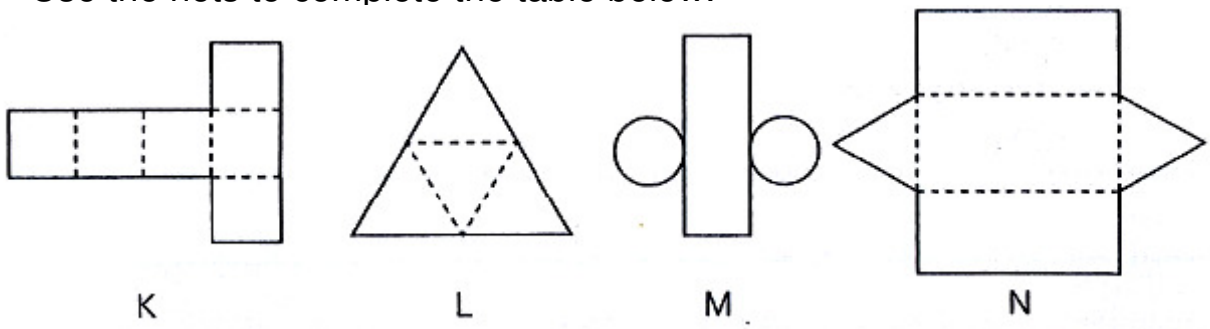
5.7 Convert the following mixed number to an improper fraction.

$2\frac{6}{10}$ = $\frac{26}{10}$ ✓ (1)

[20]

QUESTION 6:

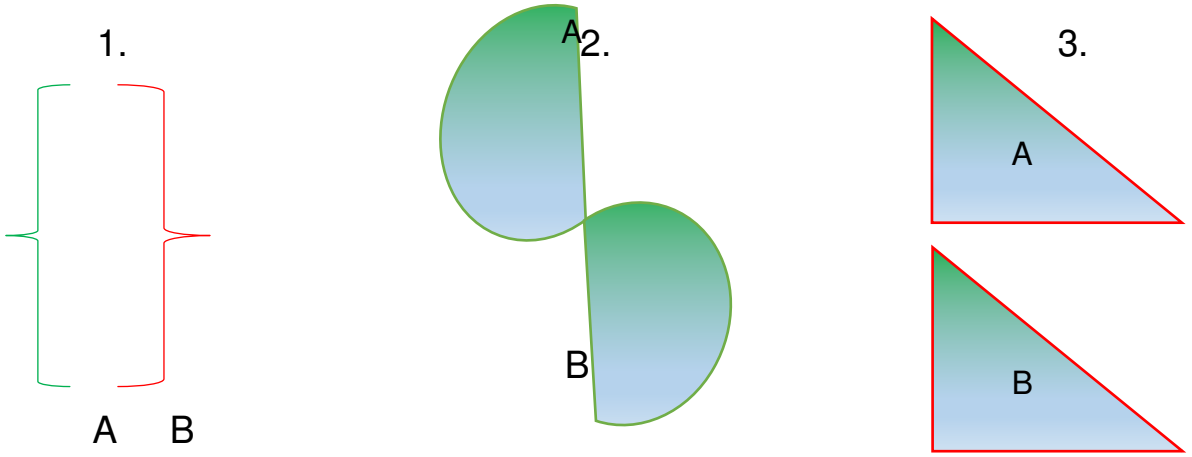
6.1 Use the nets to complete the table below:



Object	Matching net	Number of faces
a) Cube	K ✓	6 ✓
b) Triangular prism	N ✓	5 ✓
c) Triangular-based pyramid	L ✓	4 ✓

(3)

6.2 Study the following pairs of diagrams. In each case state the transformation that has occurred from A to B. Give the correct **mathematical name** for each one.



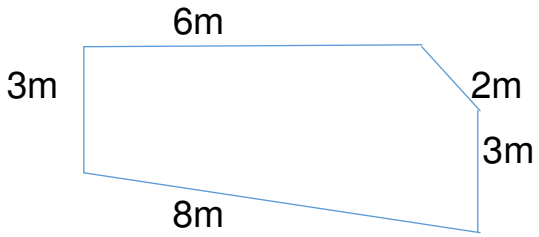
1) **Reflection** ✓ (1)

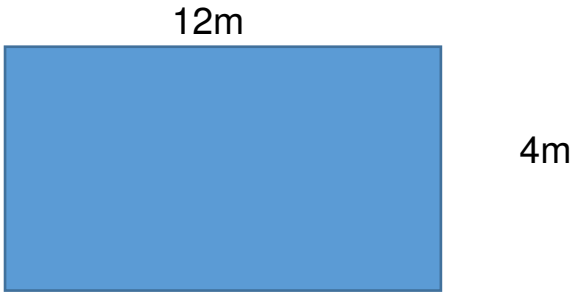
2) **Rotation** ✓ (1)

3) **Translation ✓** (1)

[6]

6.3 Find the perimeter of the shapes below:





P = **Sum of all sides** (1) ✓

= **8m + 3m + 6m +2m + 3m**

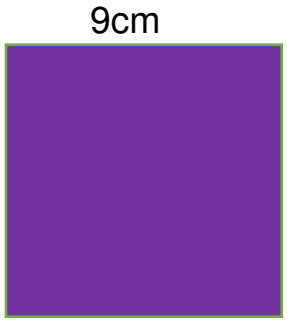
= **22m ✓** (1)

P = **2 (ℓ + b)** ✓ (1)

= **2 (12m + 4m)**

= **32m ✓** (1)

6.4 Find the area of the square with a length of 9cm.

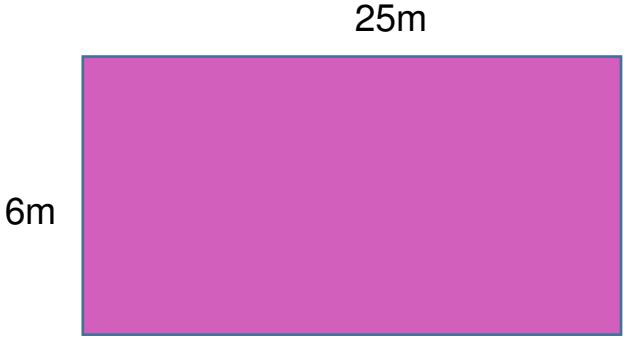


Area = **s x s** ✓ (1)

= **9cm x 9cm**

= **81cm² ✓** (1)

6.5 Find the area of the rectangle below.



Area = **l x b** ✓ (1)

= **25m x 6m**

= **150m² ✓** (1)

[8]

QUESTION 7: Problem Solving

Complete an open number sentence and show all working out.

7.1 It cost Sunshine Primary School R3 780 to hire the jumping castles for one day. How much would 8 days cost? (2)

R 3 780 x 8 = ☐ ✓

R 3 780
x 8
R 30 240 ✓

7.2 If the parents sold each hot dog for R12 and made R 6 960 in total, calculate how many hotdogs were sold. (2)

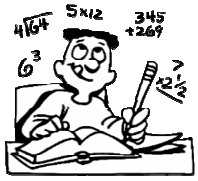
R 6 960 ÷ 12 = ☐ ✓

580 ✓
12 | 6 960
- 60
96
- 96
. . 0

7.3 What is the total capacity of the following items needed to make the hotdogs : 2,5ℓ of cooking oil, 3000mℓ of tomato sauce, 2ℓ of mustard sauce (2)

2,5ℓ + 3ℓ + 2ℓ = ☐ ✓ **or** **2 500mℓ + 3 000mℓ + 2 000mℓ = ☐**

2,5ℓ | **2 500mℓ**
3,0 | **3 000mℓ**
+ 2,0 | **+ 2 500mℓ**
7,5 ℓ ✓ | **7 500mℓ ✓**



[6]

TOTAL: 75 Marks