



STELLA MARIS COLLEGE, GZIRA

HALF-YEARLY EXAMINATIONS 2015

FORM 1

MATHEMATICS

Time: 2 hrs

ATTEMPT ALL QUESTIONS:

- ✓ Write your answers in the space available on the examination paper.
- ✓ Show clearly all the necessary steps and explanations in your working.
- ✓ Diagrams are **NOT** drawn to scale.
- ✓ The use of calculators is **NOT** allowed.
- ✓ This paper carries a total of 100 marks.

Name: _____

Class: _____

1. a) Write this number in figures:

Fifty three million, seven hundred and five thousand and twenty four.

(1 mark)

b) Place the following numbers in ascending order of size:

45,678 40×1000 10^5 54,678 10^4 1 million

(3 marks)

c) Fill in the table below:

NUMBER	NEAREST 10	NEAREST 100	NEAREST 1000
2733			
10,504			

(3 marks)

2. Work out the following:

a) Andrew had 236 marbles. He lost 49 and later won 30 from his friend in the first game. During the second game, Andrew won 56 marbles but lost 97. How many marbles has he now?

b) If Andrew shared these marbles with his 3 brothers, what did each boy including himself get?



(4 marks)

3. Work out the following:

a) $77 \div (-11) =$

b) $50 + (-10) =$

c) $673.421 \times 1000\ 000 =$

d) $56.8463 \div 1000 =$

e) $5 + 6 \times 2 - 8 \div 2 + 9 \div 3 =$

f) $(25 + 52) \div (10 - 3) =$

g) $\frac{6 \div 3 - 1}{12 \times 3 - 6}$

(7 marks)

4. a) Give the **value of 8** in:

i. 58,416 _____

ii. 874,615 _____

iii. 51,768 _____

iv. 54.861 _____

v. 8461.5 _____

vi. 765.81 _____

(3 marks)

b) Place $>$ or $<$ or $=$ between these pairs of numbers to make the statement correct.

i. Two tens 4 units _____ 24

ii. 154.9 _____ 154.09

iii. -99.9 _____ -9.99

(3 marks)

c) Find the missing numbers given that,

$$14 \times 22 = 308$$

i. _____ \times 14 = 308

ii. 308 \div 22 = _____

iii. 11 \times 14 = _____

iv. 28 \times 22 = _____

v. 14 \times 88 = _____

(5 marks)

5. Work out these problems.

a) Find the **total** of 8 tins of tuna costing 55c each and 10 tins of baked beans at €0.60 per tin.

(2 marks)

b) How many times can 45 be taken from 945?

(2 marks)

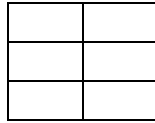
c) The larger of two numbers is 2148. Their sum is 3422. Find the other number and the **difference** of the two numbers.

(2 marks)

d) A piece of wood is 108 cm long and is divided into 2 parts. If one part is twice as long as the other part, how long is **each part**?

(2 marks)

6. a) Shade in $\frac{4}{6}$



b) Fill in the following table.

Mixed Number	Improper Fraction
$5\frac{2}{5}$	
	$\frac{106}{3}$

c) Complete the table below.

Fraction	Decimal Number
$82\frac{36}{100}$	
	45.88

(5 marks)

d) Circle the fractions which are equivalent to $\frac{9}{12}$

$$\frac{8}{10}, \quad \frac{18}{24}, \quad \frac{6}{9}, \quad \frac{12}{15}, \quad \frac{15}{20}, \quad \frac{30}{40}$$

(1 marks)

7. Work out the following:

a) $\frac{5}{8} + \frac{9}{16} - \frac{3}{4}$

(3 marks)

b) $3\frac{7}{8} + 8\frac{6}{7}$

(3 marks)

c) $5\frac{3}{7} - 2\frac{25}{35}$

(3 marks)

8. a) Work out the following:

i. $\frac{2}{3} \times \frac{7}{10} \times \frac{5}{6}$

ii. $\frac{12}{17} \times \frac{1}{5} \div \frac{12}{5}$

(6 marks)

iii. $\frac{3}{4} \div \frac{1}{2} + \frac{1}{8}$

iv. $\frac{4}{5} - \frac{3}{10} \div \frac{1}{2}$

(6 marks)

b) There are 24 lolly pops in a bag and 9 of them are red. Two-thirds of the lolly pops are orange.

i. What fraction of the lolly pops are red?

ii. How many orange lolly pops are there?



(2 marks)

9. Write the following in order, smallest first.

a) 0.5 m, 35.9 cm, $\frac{1}{1000}$ of a kilometre, 512 mm

b) 50 km, $6,000 \times \frac{1}{10}$ m, 700,000 cm, 80 000 000 mm

c) Write the following numbers as decimals and arrange your answers in ascending order.

0.6×10 , $\frac{12}{25}$, $\frac{400}{500}$, 0.071×100

d) Work out

$$275.8 \times 0.001$$

(8 marks)

10. Find the **perimeter** and **area** of the white metal frame shown below if the thickness of the metal frame is 10 cm.

50 cm



30 cm

Perimeter _____

(1 mark)

Area _____

(4 marks)

11. Sam receives an aquarium for his birthday. The aquarium measures 30 cm by 20 cm by 15 cm and is made of glass.



If the aquarium does not have a top,

- a) Find the **amount of glass** used to make up this aquarium.

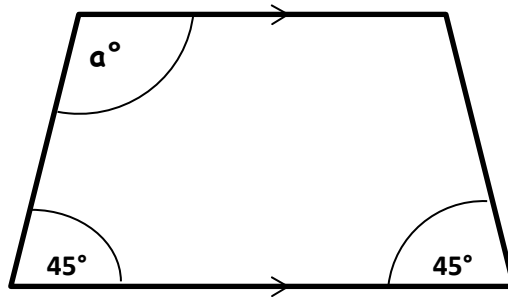
(3 marks)

- b) Calculate the **volume of water** it can hold.

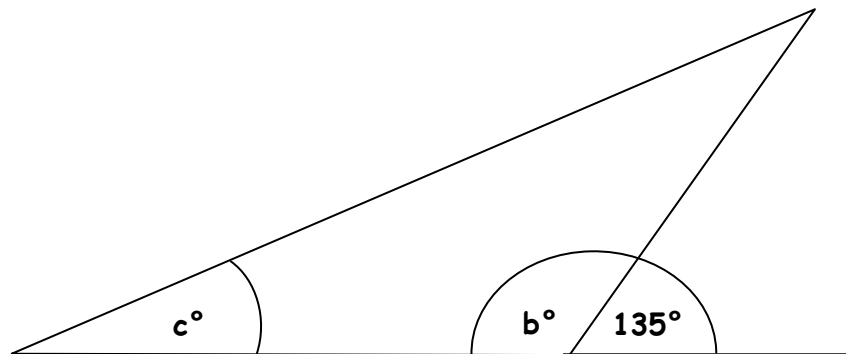
(2 marks)

13. Find the sizes of the angles a° , b° , c° , d° , e° , f° , g° and h° giving reasons for your answers.

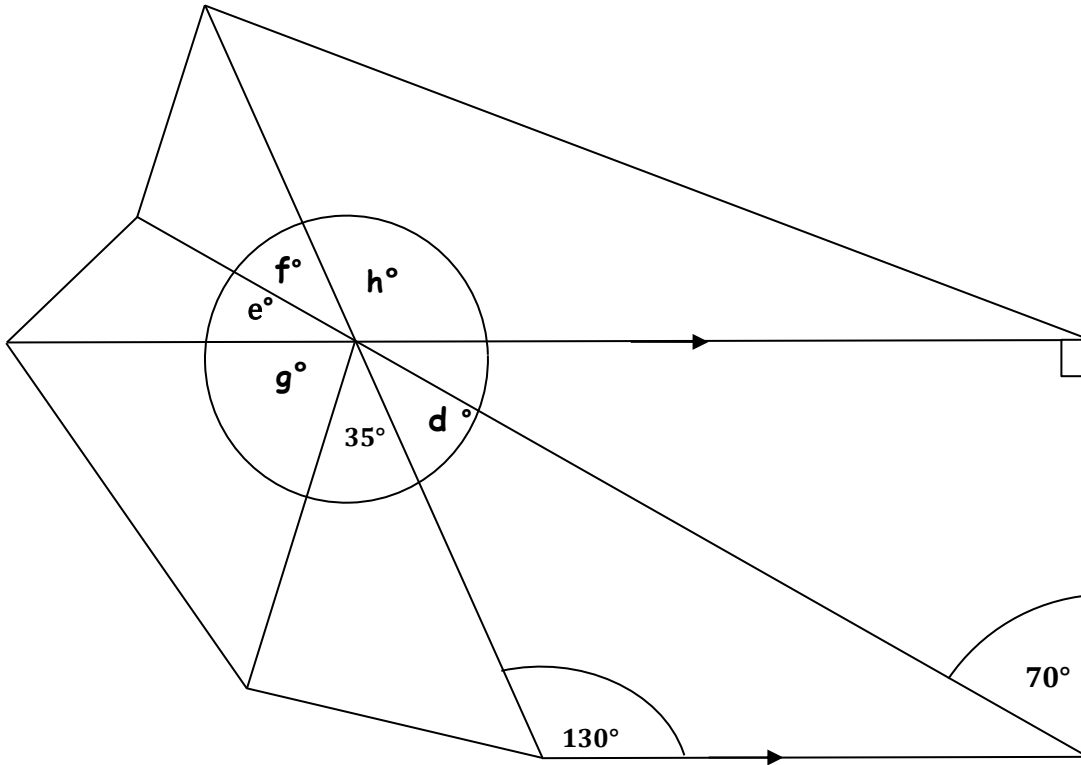
a.



b.



c.



(16 marks)

END OF PAPER