

KULLEGG SAN BENEDITTU

Secondary School, Kirkop

HALF YEARLY EXAMINATION – 2016/2017

YEAR 8 CCP

MATHEMATICS

MARKING SCHEME

Aids for Marking of Scripts

Types of Marks

- **M**(ethod) marks are awarded for knowing a correct method of solution and attempting to apply it. Method marks cannot be lost for arithmetic mistakes. They can only be awarded if the method used would have led to the correct answer had not an arithmetic mistake been made. In general a correct method is implied by a correct answer and therefore **when a correct answer is given and no work is shown, no method marks are lost.**
- **A**(ccuracy) marks are given for correct answer only (c.a.o.) Incorrect answers, even though nearly correct, score no marks. Accuracy marks are also awarded for incorrect answers which are correctly followed through (f.t.) from an incorrect previous answer, **provided that f.t. is indicated in the mark scheme.** No method (M) or accuracy (A) marks are awarded when a wrong method leads to a correct answer.
- **B** marks are accuracy marks awarded for specific results or statements independent of the method used.

Misreading

M marks can still be earned (unless that part of the question is trivialized) but the final A marks are lost.

Crossed out working

An answer or working that is crossed out and not replaced is marked as if it were not crossed out. If the answer or working is replaced, then the crossed out answer or working is ignored and should not be considered for marking.

Units

In general, missing or inaccurate units are not penalised unless otherwise indicated in the mark scheme.

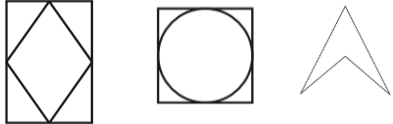
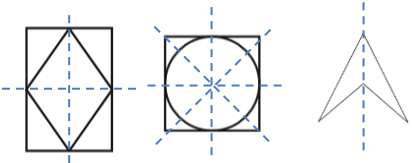
Other

- Incorrect working or statements following a correct answer are ignored.
- Marks are not sub-divisible; no half marks may be awarded.
- Other abbreviations used:
 - o.e. (or equivalent)
 - e.e.o.o. (each error or omission)
- Markers are advised to indicate the M, A or B marks awarded in the body of the script and then write their total in the margin. The total mark for each question should be written in the table included at the top of page 1 of the main paper. This measure facilitates the moderation of papers.

Non-Calculator Paper (25 marks)

Quest.		Requirements	Marks		Additional Guidance
1	a)	24	B1	4	
	b)	5	B1		
	c)	11.28	B1		
	d)	6.3	B1		
2	a)	21 000	B1	4	
	b)	50	B1		
	c)	385.5	B1		
	d)	7.448	B1		
3	a)	$182 + 110$ 292	M1 A1	4	Seen or implied
	b)	$260 - 135$ 125	M1 A1		Seen or implied
4	a)	i) 4 ii) 2	B1 B1	3	
	b)	90°	B1		
5		$\frac{4}{10}$ Dividing by 2 $\frac{2}{5}$	M1 M1 M1 A1 A1	5	For numerator For denominator Seen or implied For numerator f.t. For denominator f.t.
6	a)	$68c = €0.68$ $€0.52 + €0.68 + €1.76 + €0.45$ €3.41	M1 M1 A1	5	Seen or implied Seen or implied
	b)	$€5 - €3.41$ €1.59	M1 A1		Seen or implied f.t.

Main Paper (75 marks)

Quest.		Requirements	Marks		Additional Guidance
1	a)	i) 370 marked correctly ii) 710 marked correctly	B1 B1	4	
	b)	i) 400 ii) 700	B1 B1		
2	a)	1.08 placed as smallest number 17.49 placed as largest number 1.08, 1.3, 7.18, 13.73, 17.49	M1 M1 A2	10	-1 e.e.o.o
	b)	782 placed as largest number 256 placed as smallest number 782, 697, 645, 321, 256	M1 M1 A2		-1 e.e.o.o
	c)	i) is smaller than ii) is greater than	B1 B1		
3	a)	8	B1	5	
	b)	45	B1		
	c)	60	B1		
	d)	36	B1		
	e)	13	B1		
4	a)	Attempt at drawing angle of 55° at A Correct drawing of 55° degrees angle Labelling of angle	M1 A1 B1	5	Give this mark if student attempts to draw an angle using a protractor
	b)	i) $115^\circ (\pm 2^\circ)$ ii) obtuse	B1 B1		
5	a)	$\frac{1}{3} \times 30$ Simplifying by 3 10	M1 M1 A1	5	Seen or implied
	b)	$30 - 10$ 20	M1 A1		Seen or implied f.t.
6	a)	Correct matching of the 4 triangles	B4	7	-1 e.e.o.o.
	b)	i) quadrilateral ii) parallelogram iii) 2	B1 B1 B1		
7	a)	The 3 diagrams to be ticked: 	B1 B1 B1	11	
	b)		B2 B2 B1		-1 e.e.o.o. For middle diagram, give B1 if partially correct
	c)	Diagram completed correctly	B3		Give 1 mark for every 3 correct lines drawn

8		$8 \div 5$ 1.6 (per pot) 1.6×20 32	M1 M1 M1 A1	4	Accept other valid methods
	a)	$180^\circ - 45^\circ$ 135°	M1 A1		Seen or implied
	b)	$360^\circ - 260^\circ$ 100°	M1 A1		Seen or implied
	c)	$100^\circ + 50^\circ = 150^\circ$ $180^\circ - 150^\circ$ 30°	M1 M1 A1		Seen or implied Accept other valid methods
9	a)	$\frac{12}{13}$	B1 B1	4	For numerator For denominator
	b)	$\frac{3}{20}$	B1 B1		For numerator For denominator
10	a)	ii) 4 iii) 6 iv) 4 v) 5	B1 B1 B1 B1	13	
	b)	ii) (2, 4) iii) (3, 6) iv) (4 , 8) v) (5 , 10)	B3		-1 e.e.o.o. f.t.
	c)	i) Correct plotting of 5 points ii) Joining of points	B5 B1		-1 e.e.o.o. f.t. f.t.