

KULLEGG SAN BENEDITTU Secondary School, Kirkop

HALF YEARLY EXAMINATION – 2015/2016

Level
5 – 7

YEAR 8

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.

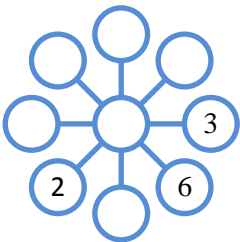
Units

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

Other

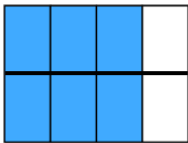
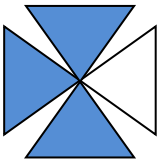
- Incorrect working or statements following a correct answer are ignored.
- Marks are not sub-divisible; no half marks may be awarded.
- Other abbreviations used:
 - o.e. (or equivalent)
 - e.e.o.o. (each error or omission)
- Markers are advised to indicate the M, A or B marks awarded in the body of 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	Mark	Additional Guidance	Total
1	a) 43.8	B1		4
	b) 7.2	B1		
	c) $9 - 12 + 1$ - 2	M1 A1		
2	a) -9, -4 So circle with -4	M1 A1	seen or implied	6
	b) $\frac{5}{15}$, $\frac{3}{15}$ So circle with $\frac{5}{15}$	M1 A1	seen or implied	
	c) 9, 15 So circle with 15	M1 A1	seen or implied	
3	a) 330°	B1		2
	b) reflex	B1		
4	$\frac{50}{100} \times 40$ 20 60	M1 M1 A1		3
5	a) $1 + 5 + 9$ 15	M1 A1		4
	b) 	B2		
6	a) Sandals	B1	Accept also €70.75	6
	b) €70.75, €85.99, €95.50	B1		
	c) $70.75 + 85.99 + 95.50$ 252.24	M1 A1		
	d) $265 - 252.24$ 12.76	M1 A1	f.t.	

Main Paper (75 marks)

Quest.		Requirements	Mark	Additional Guidance	Total
1		$\frac{3}{10}$ matches with 30%	B1		5
		25% matches with 0.25	B1		
		$\frac{3}{4}$ matches with 0.75	B1		
		100% matches with 1	B1		
		0.1 matches with $\frac{1}{10}$	B1		
2	a)	0.8	B1		4
	b)	0.4	B1		
	c)	400	B1		
	d)	640	B1		
3		-4	B1		5
		8 + 3 11	M1 A1	Seen or implied	
		-2 - (-5) = 3 +3	M1 A1	Seen or implied Both sign and number seen	
4		7(2) + 10 14 + 10 24	M1 M1 A1		3
5	a)	132°	B1	± 2°	3
	b)	Angle of 68° correctly drawn and marked.	B1 B1	± 2°	
6	a)	False	B1		7
	b)	False	B1		
	c)	True	B1		
	d)	False	B1		
	e)	True	B1		
	f)	False	B1		
	g)	True	B1		
7	a)	26	B1		5
	b)	$48 \div 8 = 6$ <i>or</i> $48 - 8 = 40$ $\times 6$ +40	M1 A1	Both multiplication and number seen.	
	c)	7×5 35	M1 A1		

8	a)	$(2 \times 20) + (3 \times 25)$ $40 + 75$ $115c$	M1 M1 A1	o.e. Both correct	7
	b)	$6 \times 20 = 120$ $170 - 120 = 50$ $50 \div 25 = 2$	M1 M1 A1		
	c)	$20 \times a + 25 \times b$	B1		
9	a)	$\frac{3}{10} \times 30$ €9	M1 A1	f.t.	5
	b)	$5 + 9 = 14$ $30 - 14$ €16	M1 M1 A1		
10	a)	i) $50.3 - 40.2$ 10.1 ii) Putting numbers in order Attempt at finding median 45.1 iii) Addition of weights = 539.1 $539.1 \div 12$ 44.925 44.9	M1 A1 M1 M1 A1 M1 M1 M1 A1	f.t.	15
	b)	i) Drawing bar correctly. ii) dog iii) $7 - 4 = 3$ iv) $4 + 8 + 7 + 6 + 2 = 27$	B1 B1 M1 A1 M1 A1		
11	a)	i) $\frac{3}{10}$ ii) $\frac{3}{10} \times 100 = 30\%$	B1 M1 A1	f.t.	5
	b)	 	B1 B1		

12	a)	Angles on a straight line add up to 180° . Angles in a revolution add up to 360° . Each angle in an equilateral triangle is 60° .	B1 B1 B1	Seen or implied	11
	b)	i) 180° ii) $180^\circ - 50^\circ$ 130° iii) $b = 126^\circ$ $c = 54^\circ$	M1 M1 A1 B1 B1		
	c)	$180 - (90 + 29)$ 61° Angles in a triangle add up to 180° .	M1 M1 A1		