Bronze Level

Mark Scheme 1

Level	IGCSE
Subject	Maths
Exam Board	Edexcel
Difficulty Level	Bronze
Booklet	Mark Scheme 1

Time Allowed: **60 minutes**

Score: **/50**

Percentage: **/100**

Grade Boundaries:

9	8	7	6	5	4	3	2	1
>95%	85%	75%	65%	55%	45%	35%	25%	<25%

Question Number	Working	Answer	Mark	Notes	
1. (a)	$\frac{24.1}{0.6} - 38.44 = 40.166\ldots - 38.44$		2	M1	for 0.6 or $\frac{3}{5}$ or 40.166… (4 figures correct rounded or truncated) or $40\frac{1}{6}$ or 38.44 or $38\frac{11}{25}$
		1.726666667		A1	Accept if first 4 figures correct (rounded or truncated) Also accept 1.726 & or $\frac{259}{150}$ or $1\frac{109}{150}$
(b)		1.73	1	B1	ft from (a) if answer to (a) is a decimal with more than 3 sf
					Total 3 marks
Question Number	Working	Answer	Mark	Notes	(alternative method)
2 .	(5 − 2) × 180 or 3 × 180 or (2 × 5 − 4) × 90 or 6 × 90 or 360 + 180		4	M1	360−(83+66+53+96) Condone 1 incorrect ext angle
	540			A1	540 seen scores M1A1 62
	"540" − (97 + 114 + 127 + 84)			M1	dep on first M1 180 − "62"
		118		A1	cao
					Total 4 marks

Question Number	Working	Answer	Mark	Notes
3. (a)		$w(w - 9)$	2	B2 Award B2 also for $(w \pm 0)(w - 9)$ B1 for factors which, when expanded & simplified, give two terms, one of which is correct except B0 for $(w + 3)(w - 3)$ SC B1 for $w(w - 9w)$
(b)	$3x = -6$ or $3x = 1 - 7$ or $5x - 2x = -6$ oe		3	M2 for correct rearrangement with x terms on one side and numbers on the other AND correct collection of terms on at least one side M1 for $5x - 2x = 1 - 7$ oe ie correct rearrangement with x terms on one side and numbers on the other
		-2		A1 cao dep on M2
(c)	$y^2 + 3y - 7y - 21$		2	M1 for 3 correct terms out of 4 or for 4 correct terms ignoring signs or for $y^2 - 4y + n$ for any non-zero value of n
		$y^2 - 4y - 21$		A1 cao
				Total 7 marks

Question Number	Working	Answer	Mark	Notes
4. (a)	1 − (0.6 + 0.3)		2	M1
		0.1		A1 Also accept $\frac{1}{10}$ or 10%
(b)	30 × 0.6		2	M1
		18		A1 cao Do not accept $\frac{18}{30}$
				Total 4 marks

Question Number	Working	Answer	Mark	Notes	
5.	$\frac{10}{12}$ and $\frac{9}{12}$ eg $\frac{10-9}{12}$, $\frac{10}{12} - \frac{9}{12}$		2	B2	B1 for $\frac{10}{12}$ or $\frac{9}{12}$ Also accept $\frac{5\times2}{6\times2}$ or $\frac{3\times3}{4\times3}$
					Alternative method B1 for both fractions correctly expressed as equivalent fractions with denominators that are common multiples of 6 and 4 eg $\frac{20}{24}$ and $\frac{18}{24}$ or $\frac{5\times4}{6\times4}$ and $\frac{3\times6}{4\times6}$ B1 (dep on first B1) for evaluation as a correct fraction which is equivalent to $\frac{1}{12}$ eg $\frac{2}{24}$
					SC B1 for multiplying both sides by 12 ie 10 − 9 = 1
					Total 2 marks

Question Number	Working	Answer	Mark	Notes	
6. (a)		Rotation	3	B1 Accept 'rotate', 'rotated' etc	These marks are independent but award no marks if the answer is not a single transformation
		90° clockwise		B1 Also accept quarter turn clockwise, −90° or 270°	
		(0, 0)		B1 Also accept origin, *O*	
(b)	vertices (4,4), (4,2), (5,2)	**R** correct	2	B2 Condone omission of label B1 for 2 correct vertices	
					Total 5 marks

Question Number	Working	Answer	Mark	Notes
7.	3+5+7 or 15		3	M1 15 may be denominator of fraction or coefficient in an equation such as 15*x* = 90
	90 ÷ (3+5+7) or 90 ÷ "15" or 6 or $\frac{7}{15}$ oe			M1 dep
		42		A1 Also award for 18 : 30 : 42
				Total 3 marks

Question Number	Working	Answer	Mark	Notes	
8. (i)		3, 5, 7, 11	2	B1 cao	Brackets not necessary
(ii)		2, 3, 5, 7, 9, 11		B1 cao (B0 if 3 or 5 or 7 or 11 repeated)	
					Total 2 marks

Question Number	Working	Answer	Mark	Notes
9.		$C = \frac{3d+7}{2}$ oe	3	B3 B2 for $\frac{3d+7}{2}$ oe B2 for $C = 3d + 7 \div 2$ oe B1 for $3d + 7 \div 2$ B1 for C = linear expression in d
				Total 3 marks

Question Number	Working	Answer	Mark	Notes
10. (a)	$\frac{BC}{5.2} = \frac{9}{6}$ oe		2	M1 for correct, relevant proportionality statement with 3 values substituted
		7.8		A1 cao
(b)	$\frac{CE}{7.2} = \frac{6}{9}$ oe or $\frac{CE}{6} = \frac{7.2}{9}$ oe or $\frac{CE}{7.2} = \frac{5.2}{"7.8"}$ oe or $\frac{CE}{5.2} = \frac{7.2}{"7.8"}$ oe		2	M1 for correct, relevant proportionality statement with 3 values substituted
		4.8		A1 cao
				Total 4 marks

Question	Working	Answer	Mark	Notes
11.	15/100 x 640 (=96) 640 – "96"	544	3	M1 M1 dep or M2 for 640 x 0.85 A1
				Total 3 marks

12. (a)	120 – 90 (=30)	30/120 oe	2	M1 or 1 – 90/120 A1
(b)	"30/120" X 200 oe	50	2	M1 ft or 200 – "90/120" x 200 (i.e. 200 – "heads"/120 x 200) A1 ft ft if final ans < 200
				Total 4 marks

13.	15÷6 (=2.5) or 6÷15 (=0.4) or 230÷6 (=38.33) or 200÷6 (=33.33) or 6÷230 (=0.026) or 6÷200 (=0.03) 230 x "15/6" or 200 x "15/6" oe	apples = 575 & raspberries = 500	3	M1 M1 dep (i.e "correct" calculation for apples OR raspberries) A1 cao both correct SC M1M1A0 if answers wrong way round with/without working
				Total 3 marks

14	$72 \div 1\frac{1}{3}$ oe	54	3	B1M1 accept 72 ÷ 1.33 (2dp or better) or 0.9 x 60 (B1 M0 for 72 ÷ 1.2(0){=60} or 72 ÷ 80 {=0.9} or 72 ÷ 1.3 {=55.4 or better}) or 72000 ÷ 1.33(or better) A1 cao
				Total 3 marks