Bronze Level

Mark Scheme 7

Level	IGCSE
Subject	Maths
Exam Board	Edexcel
Difficulty Level	Bronze
Booklet	Mark Scheme 7

Time Allowed: **58 minutes**

Score: **/48**

Percentage: **/100**

Grade Boundaries:

A*	A	B	C	D	E	U
>85%	75%	60%	45%	35%	25%	<25%

1 (a)		18a – 12b + 6c (oe)	1	B1
(b)		t(t – 10)	2	B2 also accept (t ± 0)(t − 10) for B2 B1 for factors which, when expanded and simplified, give only two terms, one of which is correct. **SC** B1 for $t(t - 10t)$
(c)	$3x = 7 - 2x$ $5x = 7$ **or** $5x - 7$ **= 0**	1.4oe	3	M1 **or** $x = \frac{7}{3} - \frac{2x}{3}$ M1 **or** $\frac{5x}{3} = \frac{7}{3}$ **or** $x + \frac{2x}{3} = \frac{7}{3}$ A1 Answer dependent on at least M1
				Total 6 marks

2	$\frac{8}{18}-\frac{3}{18}$ **or** $\frac{8n}{18n}-\frac{3n}{18n}$ $\frac{8}{18}-\frac{3}{18}=\frac{5}{18}$ **or** $\frac{8n}{18n}-\frac{3n}{18n}=\frac{5n}{18n}\left(=\frac{5}{18}\right)$		2	M1 for 2 correct fractions with a common denominator a multiple of 9 & 6 A1 $\frac{5}{18}$ coming from $\frac{8}{18}-\frac{3}{18}$ **or** for final fraction equivalent to $\frac{5}{18}$
				Total 2 marks

3 (a)		Enlargement (Scale factor) 2 (Centre) (0,4)	3	B1 B1 B1 NB. Award no marks for more than one transformation (i.e. if NOT a **single** transformation)
(b)		Shape in correct position	2	B2 vertices at(2, 0) (6, 0) (10, – 4) (10, – 8) B1 for **any** 2 vertices correct **or** correct orientation but wrong position **or** rotating shape P correctly - vertices at 7, 0), (9, 0) (11,−2), (11, −4)
				Total 5 marks

Question Number	Working	Answer	Mark	Notes
4 (a)	1 – (0.15 + 0.4 + 0.35)	0.1	2	M1 A1 oe
(b)	0.15 + 0.4	0.55	2	M1 A1 oe
				Total 4 marks

5	3/5 x 15 or 15 ÷ 5 × 3	9	2	M1 M1 for 3/5 or 15 ÷ 5 × 3 A1
				Total 2 marks

6	7800 ÷ 9.75 or 7800 ÷ 585 x 60	800	3	M2 M1 for 7800 ÷ 9.45 or 7800 ÷ 585 or 13.3.... A1
				Total 3 marks

7 (a)		Rotation 90° or quarter turn anticlockwise (0,0) or *O* or origin	3	B1 B1 accept 90° or – 270° B1 **Award B0 (no marks) if the response is not a SINGLE transformation**
(b)		Shape in correct position	2	B2 B1 for translation 6 units left or 2 units up
				Total 5 marks

8 (a)	21/24 – 20/24 = 1/24		2	B2 for both fractions written correctly with a common denominator, followed , if necessary, by cancelling to 1/24 B1 for 1 correct fraction with denominator of a multiple of 24
(b)	5/8 x 12/7 or 15/24 ÷14/24	60/56	2	M1 leaving first fraction unchanged, changing ÷ to x and inverting the second fraction or converting each fraction with a common denominator of 24 oe with ÷ sign A1 60/56 from the x or 15/14 from the ÷
				Total 4 marks

9	$5y=14$ **or** $7y-2y=14$ **or** $5y=8+6$ **or** $5y-14=0$	2.8	3	M2 M1 A1	for correct rearrangement with *y* terms on one side AND correct collection of terms on at least one side or for correct collection to 2 terms for correct rearrangement with *y* terms on one side and numbers on the other eg $7y-2y=8+6$ **OR** correct collection and simplification of either numbers or *y* terms eg $5y-6=8$ or $5y=a$ or $by=14$ 2.8 oe dependent on at least one M1
					Total 3 marks

10	Factor tree or repeated division with 2 or more correct prime factors (2, 2, 3, 17) Fully correct factor tree or repeated division or 2, 2, 3, 17	2 x 2 x 3 x 17	3	M1 M1 A1	condone 1s; factors must multiply to 204 condone 1s
					Total 3 marks

Question Number	Working	Answer	Mark	Notes
11	12 : 8 oe or 8:12		2	M1
		1.5 oe		A1
				Total 2 marks

12		translation	2	B1	Also accept translated, translate etc	These marks are independent but award no marks if the answer is not a single transformation
		$\begin{pmatrix} -2 \\ 1 \end{pmatrix}$		B1	Also accept 2 to the left and 1 up	
						Total 2 marks

13 (i)		$-1 \leq x < 3$	4	B2	B1 for either $-1 \leq x$ or for $x < 3$ as a final answer
(ii)		−1 0 1 2		B2	B1 for 4 correct and 1 wrong or for 3 correct and 0 wrong
					Total 4 marks

14	$5.2^2 + 3.8^2$ or 27.04 + 14.44 or 41.48		3	M1	for squaring and adding
	$\sqrt{5.2^2 + 3.8^2}$			M1	(dep) for square root
		6.44		A1	for answer rounding to 6.44
					Total 3 marks