Bronze Level

Mark Scheme 8

Level	IGCSE
Subject	Maths
Exam Board	Edexcel
Difficulty Level	Bronze
Booklet	Mark Scheme 8

Time Allowed: **59 minutes**

Score: **/49**

Percentage: **/100**

Grade Boundaries:

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

Question	Working	Answer	Mark	Notes
1 (a)	$900 \times \frac{13}{6}$		2	M1 for $\frac{900}{6}$ or 150 or $\frac{13}{6}$ (= 2.16…) oe or 900×13 or 11 700
		1950		A1 cao
(b)	$6 \times \frac{1250}{750}$ or $1250 \div \frac{750}{6}$		2	M1 for $\frac{1250}{750}$ oe(= 1.66…) or $\frac{750}{1250}$ oe (= 0.6) or $\frac{750}{6}$ oe (=125)
		10		A1 cao
				Total 4 marks

Question	Working	Answer	Mark	Notes
2	852×10.75 **or** $10\frac{3}{4} \times 852$ **or** $\frac{645 \times 852}{60}$		3	M2 M1 for 852×10.45 or 8903.4 or 852×645 or 549 540
		9159		A1 cao
				Total 3 marks

Question	Working	Answer	Mark	Notes
3 (a)		$20c^2$	1	B1 Also accept $c^2 20$
(b)		$x(x + 4)$ or $x(4 + x)$	2	B2 Award B2 also for $(x \pm 0)(x + 4)$ oe B1 for factors which, when expanded and simplified, give two terms, one of which is correct except B0 for $(x + 2)(x - 2)$
(c)	$2^3 + 5 \times 2$ or $8 + 10$		2	M1
		18		A1 cao
				Total 5 marks

Question	Working	Answer	Mark	Notes
4 (a)		$-1 < x \leq 4$	2	B2 Also accept both $x > -1$ **and** $x \leq 4$ or $4 \geq x > -1$ B1 for a double-ended inequality which is correct at one end (ignore the other end) eg. $-1 \leq x \leq 4$, $-1 < x > 4$ **or** $-1 \leq x < 4$, **or** award B1 for an answer of $x > -1$ **or** $x \leq 4$
(b)(i)	$2y - 6 \geq 1$		3	M1 M2 for $y - 3 \geq \frac{1}{2}$
	$2y \geq 7$			M1 For method marks condone use of > instead of ≥
		$y \geq 3\frac{1}{2}$ oe		A1
(ii)		4	1	B1 cao
				Total 6 marks

Question	Working	Answer	Mark	Notes
5 (a)	Enlargement scale factor 3 centre (4, 3)		3	B3 B1 for enlargement, enlarge etc B1 for 3, ×3, three, $\frac{3}{1}$ B1for (4, 3) Condone omission of brackets but do not accept $\begin{pmatrix}4\\3\end{pmatrix}$ These marks are independent but award no marks if the answer is not a single transformation
(b)	**R** correct [vertices at (5, 8) (5, 14) and (2, 8)]		1	B1 Condone omission of label
(c)	Enlargement scale factor $\frac{1}{3}$ centre (8, 2)		2	B2 B1 for enlargement, enlarge etc **and** $\frac{1}{3}$, $\times\frac{1}{3}$, 0.33(3….) B1for (8, 2) Condone omission of brackets but do not accept $\begin{pmatrix}8\\2\end{pmatrix}$ **These marks are independent but award no marks if the answer is not a single transformation**
				Total 6 marks

Question	Working	Answer	Mark	Notes
6	$1 \times 6 + 2 \times 8 + 3 \times 7 + 4 \times 3 + 5 \times 1$ or $6 + 16 + 21 + 12 + 5$ or 60		3	M1 for at least 4 correct products stated or evaluated
	"60" ÷ 25			M1 (dep)
		2.4 oe		A1 Also accept 2 if both method marks are scored
				Total 3 marks

Question	Working	Answer	Mark	Notes
7 (a)	$24 \times \frac{5}{3}$		2	M1 or 24 ÷ 3 (=8)
		40		A1 cao
(b)	$\frac{45}{5} \times 4$ oe		2	M1 or 45 ÷ (4 + 1) (=9)
		36		A1 cao
				Total 4 marks

Question	Working	Answer	Mark	Notes
8 (a)	eg $\frac{(5-2)\times 180}{5}$, $180 - \frac{360}{5}$		2	M1 for (5 2) × 180 r 3 180 or 540
		108		A1 cao
(b)	$y = \frac{360}{6}$		2	M1
		60		A1 cao
				Total 4 marks

Question	Working	Answer	Mark	Notes
9 (a)		$t(t + 6)$	2	B2 Also award B2 for $(t + 0)(t + 6)$ B1 for factors which, when expanded and simplified, give two terms, one of which is correct.
(b)	$7x - 5x = -4 + 5$ or $2x - 5 = -4$ or $7x = 5x + 1$ etc		3	M1 for correct rearrangement with x terms on one side and numbers on the other or for correct collection of either x terms or numbers on one side in a correct equation
	$2x = 1$			M1 Award also for $-2x = -1$
		$\frac{1}{2}$ oe		A1 Award 3 marks if answer is correct and at least one method mark scored
(c)	$8y + 12 + 2y - 12$		2	M1 For 3 terms with correct signs or 4 terms without signs
		$10y$		A1 Also accept $10y + 0$
				Total 7 marks

Question	Working	Answer	Mark	Notes
10		2 4	2	B2 −withhold B1 mark for eeoo
				Total 2 marks

Question	Working	Answer	Mark	Notes
11 (a)	$64.8^2 + 48.6^2$ or $4199.04 + 2361.96$ or 6561		3	M1 for squaring and adding
	$\sqrt{64.8^2 + 48.6^2}$			M1 (dep) for square root
		81		A1
(b)	$\frac{w}{38.4} = \frac{102}{48}$ oe eg $38.4 \times \frac{102}{48}$		2	M1 for a full method
		81.6		A1 cao
				Total 5 marks