



Conversion - Percentages, Fractions & Decimals

Mark Scheme 2

Level	IGCSE
Subject	Maths (0580)
Exam Board	Cambridge International Examinations (CIE)
Paper Type	Extended
Topic	Number
Sub-Topic	Conversion - Percentages, Fractions & Decimals
Booklet	Mark Scheme 2

Time Allowed: 64 minutes

Score: /53

Percentage: /100

Grade Boundaries:

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

1	(a) 600 000	1	2	M1 for $22 \times 60 \times 60 \div 1000$ oe
	(b) 79.2			

2	11.3	3	M2 $22 \times 1.852 \times 1000/3600$ oe or M1 $22 \times$ figs 1852 or $22 \times 1000/3600$
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3	0.8^2	2	M1 conversion of $\frac{16}{27}$ (= 0.5(9...)) and 0.8^2 (= 0.64) to decimals seen
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4 (a)	(i) 34.65	1	2	M1 for 0.15×277.2 implied by 41.6 or 41.58 seen and not spoiled
	(ii) 41.58			
	(iii) 264	3	M2 for $277.2 \div (1 + 0.05)$ o.e. or M1 for recognition that $105(\%) = 277.20$	
(b)	(i) 1000	2	M1 for $2200 \div (2 + 4 + 5) \times 5$	
	(ii) 3650	2	M1 for $2200 \div 44 \times 73$	

5	150	2	M1 $\frac{18}{12} \times 100$
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6	(a) $1/50$	1	cao
	(b) 4.35	1	Allow fraction

7	20	2*	M1 $2.5 \div 0.125$ oe
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8	(a) $25/32$	1	$1\sqrt{\quad}$
	(b) 0.781 (25)		

9 (a)	15 : 13 or 13 : 15	B1	Allow $n : 1$, or $1 : n$, where n is 15/13, 13/15, 1.15 (3 or 4), 0.866 (6 or 7)
(b)	$0.28 \times 45\,000$ o.e. 12 600	M1 A1	
(c)	$\frac{16\,000}{39\,000} \times 100$ o.e. 41.0 or better	M1 A1	Condone 41 41.0 (2 or 3)
(d)	$\frac{45\,000}{2.25}$ o.e. 20 000	M1 A1	SC1 for 36 000
(e)	$\frac{5}{30} \times 84\,000$ o.e. 14 000	M1 A1	Their attempt at $45\,000 + 39\,000$ and their '30'
			[9]

10	(a) 5.8×10^8 (b) 98 (c) 10200	1 2* 2*	M1 figs 58 \div figs 59 or figs 9830508 M1 figs 59 \div figs 58 $\times 10^n$ or $\frac{1}{(b)} \times 10^n$ $n = 3$ or 6
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11	(a)	144:96 <u>Final</u> answer 3:2 or 1.5:1 or 1:0.667	B1 B1 (2)	After B0 , allow SC1 for <u>reversed</u> "correct" final ans. www2
	(b)	(i) 32 (children)	B1	
		(ii) 54 (adults off)	B1	
		(iii) 110 (adults on)	B1	
		(iv) 26 (=x) w.w.w.	B1 (4)	
	(c)	$300 \times \frac{4}{thier(6+5+4)}$ 80 children	M1 A1 (2)	www2
	(d)	(i) <u>Final Ans.</u> 21 13 or (0)9 13 pm	B1	Condone hrs but hrs and <u>minutes</u> ⇒ BO
		(ii) 7 h 20 min (o.e) $\times \frac{10}{110}$ (or $\times \frac{100}{110}$)	M1	Implied by 6 h 40 min or 400 min
		40 min	A1 (3)	www2
			(11)	

12	194(.4)	2	M1 for $54 \times 3600/1000$ or SC1 for <i>figs</i> 194....seen	2
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