

Integers, HCF/LCM, Prime numbers, Sig Figs, Dec Places

Mark Scheme 1

Level	IGCSE
Subject	Maths (0580)
Exam Board	Cambridge International Examinations (CIE)
Paper Type	Extended
Topic	Number
Sub-Topic	Integers, HCF/LCM, Prime numbers, Sig Figs, Dec Places
Booklet	Mark Scheme 1

Time Allowed: 60 minutes

Score: /49

Percentage: /100

Grade Boundaries:

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



1	144	2	M1 for finding a correct product of prime factors or correctly listing a minimum of 3 multiples of 36 and 48 or for answer $2^4 \times 3^2$ oe or $144k$
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2	3.590 cao	1	
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3	(a) 9 and 16 (b) 11	1 1	
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4	71000 cao	1	
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5	14	2	M for $56 = 2 \times 2 \times 2 \times 7$ soi or $70 = 2 \times 5 \times 7$ soi or 2×7 as final answer
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6	(a) $2^5 \times 3^2 \times 7$ oe final answer (b) 2.016×10^3	3 1	B2 for product of two of $2^5, 3^2, 7$ or B1 for 2, 3 and 7 seen or M1 for 2×1008 or 3×672 or 7×288 soi
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7	9.5	1	
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8	(a)	$2 \times 3 \times 5$	2	B1 for 2, 3, 5 as prime factors
	(b)	90		

9	[+]17	1	
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10	18	2	M1 for $36 = 2 \times 2 \times 3 \times 3$ so or $90 = 2 \times 3 \times 3 \times 5$ so or listing the correct factors of 36 and 90 showing a minimum of 2, 3, 6, 9 and 18
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11	17	1	
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12	170 cao	1	
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13	(a)	12, 15	1	
	(b)	11, 13		

14	96	2	B1 for $96k$ or $2^5 \times 3$ or for listing multiples of each up to 96
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15	(a)	15.1 cao	1	
	(b)	20 cao		



16	$6 + 5 \times (10 - 8) = 16$	1	One pair of brackets only
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17 (a)	$2 \times 3 \times 3 \times 5$	2	B for 2, 3, [3] and 5 identified as only prime factors or M1 for partial prime factorisation $6 \times 3 \times 5$ or $2 \times 9 \times 5$ or $3 \times 3 \times 10$ or $2 \times 3 \times 15$
(b)	630	2	M for $2 \times 3^2 \times 5 \times 7$ oe or for listing multiples of 90 and 105 at least up to 630

18 (a)	$\frac{5 \times 2}{20}$	1	
(b)	0.5 or $\frac{1}{2}$ cao	1	

19	(a)	570 000	1	
	(b)	5.69×10^5	1	

20		- 16	1	
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21		5.293 cao	2	B for 5.29 or 5.292 to 5.2927
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22	11 or -11	1	
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23	(a)	77	2	M1 for 11,13,17,19 clearly identified, ignore numbers less than 8 with no other numbers greater than or equal to 8 besides possibly an extra 17
	(b)	either 18 or 19 or both	2FT	M1 for 11,13,17 clearly identified, ignore numbers less than 8 with no other numbers greater than or equal to 8 besides possibly an extra 17 or for <i>their</i> (a) - 58

24	(a)	8000 cao	1	
	(b)	0.08 cao	1	

25	64000 or 6.4×10^4	2	SC1 for 63800 or 6.38×10^4 or figs 64 or 6.4×10^k in answer space.
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