

## UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS Cambridge Checkpoint

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MATHEMATICS 1112/01

Paper 1

For Examination from 2012

SPECIMEN MARK SCHEME

1 hour

**MAXIMUM MARK: 50** 



Quest	tion	1		
Part		Mark	Answer	Further Information
(a)	(i)	1	4.837	
	(ii)	1	0.927	
	(iii)	1	15060	
(b)	(i)	1	276.52	
	(ii)	1	280	
Total		5		

Questi	ion	2		
Part		Mark	Answer	Further Information
(a)		1	$3\frac{5}{6}$	
(b)		1	12	
(c)	(i)	1	=	
	(ii)	1	<	
Total	·	4		

Question	3		
Part	Mark	Answer	Further Information
(a)	1	148.5	
(b)	2	1.79	1 mark for 1.78 or 1.785 as answer
(c)	2	0.77	1 mark for 3.73 or 2.85 or 2.42 seen in working
Total	5		

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Question		4		
Part		Mark	Answer	Further Information
(a)	(i)	1	115(°)	
	(ii)	1	73(°)	
(b)		2	42(°) corresponding angles OR TQ is parallel to SR	1 mark each
Total		4		

Quest	ion	5		
Part		Mark	Answer	Further Information
(a)	(a) (i) 1		5.4	
	(ii)	1	2.456	
(b)	(i)	1	752180	
	(ii) 1 1.315		1.315	
(c)		1	reason explaining that multiplication by a number between 0 and 1 gives answer less than starting number	Allow 'it should be less than 342.'  Do not allow 'it should be less.'
Total		5		

Question	6		
Part	Mark	Answer	Further Information
(a)	2	Correct tally marks $150 < h \le 155 $ / 1 $155 < h \le 160 $ ### / 5 $160 < h \le 165 $ ### / 6 $165 < h \le 170 $ // 2 $170 < h \le 175 $ // 2 $1, 5, 6, 2, 2$ correct in frequency column	1 mark each Frequencies follow through their tallies.
(b)	2	Crosses correctly positioned [follow through].  Crosses joined with ruled line.	1 mark each
Total	4		

Question		7			
Part		Mark	Answer	Further Information	
(a)	(i)	1	25.84 (metres)		
	(ii)	1	5600 (kilograms)		
(b)		1	140 – 180 (kilometres)	(kilometres) Accept any answer in given range	
(c)		2	200 (millilitres)	1 mark for answer 0.2 or for 1600(ml) seen in working	
Total		5			

Question 8				
Part		Mark	Answer	Further Information
(a)		1	6 <i>a</i>	
(b)		1	b (2b – 5)	Or (2 <i>b</i> – 5) <i>b</i>
(c)	(i)	1	3	
	(ii)	2	0.5 [OE]	1 mark for 2 as answer or $5x + 3x = 4$ seen or implied
Total		5		

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Question	9						
Part	Mark	Answ	er				Further Information
(a)	1	Table	Table completed correctly				Both correct = 1 mark
		Х	-1	0	2	4	
		У	10	8	4	0	
(b)	2	correc	correct line drawn				1 mark for 3 points plotted correctly, follow through their table
(c)	2		line passing through (1, 2) and (3, 8) drawn				1 for any line through (1, 2) <b>or</b> any line with gradient 3
Total	5						•

Question	10		
Part	Mark	Answer	Further Information
(a)	1	True indicated Reason: no sector for 6	In each part accept an equivalent reason In each part both the answer and the reason must be given
(b)	1	'Not enough information' indicated  Reason: number of people not shown on chart	
(c)	1	False indicated, mode is 4.	
Total	3		

Quest	tion	11			
Part		Mark	Answer	Further Information	
(a)	(i)	1	3, 6	Both correct, accept reversed order	
	(ii)	1	30, 60	Both correct, accept reversed order	
(b)	(i)	1	5		
	(ii)	1	16		
	(iii)	1	1		
Total		5			

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