

MARK SCHEME for the May/June 2009 question paper
for the guidance of teachers

0607 CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/05

Paper 5 (Core), maximum raw mark 24

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

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M marks are given for a correct method.

A marks are given for an accurate answer following a correct method.

B marks are given for a correct statement or step.

D marks are given for a clear and appropriately accurate drawing.

P marks are given for accurate plotting of points.

E marks are given for correctly explaining or establishing a given result.

C marks are given for clear communication.

Abbreviations

cao correct answer only

cso correct solution only

ft follow through

oe or equivalent

soi seen or implied

ww without working

www without wrong working

Question	Answer						Mark	Notes	Comments		
1	Number of discs	Last disc		Number of discs	Last disc		7	B7	1 for each shaded square		
	2	2		9	2					17	2
	3	2		10	4					18	4
	4	4		11	6					19	6
	5	2		12	8					20	8
	6	4		13	10						
	7	6		14	12						
	8	8		15	14						
			16	16							
								[7]			
2	64, 128						2	B1 for each	[2]		
3 (a)	2						1	B1			
(b)	30						1	B1			
(c)	8						2	B2 OR M1 for 2 (68 – their 64) A1 correct evaluation			
(d)	126						1	B1			
(e)	144						2	B2 OR M1 for 2(200 – their 128) or 256 – 2(256–200) oe A1 correct evaluation			
								ft with 2 × their 128 for 256	[7]		

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4	(a)	23	2	B2 OR M1 recognise sequence continues in 2's	
	(b)	44	2	B2 OR M1 for 24/2 or better	[4]
5	(a)	(10) 8, 6, 4, 2, 9, 5, 1, 3 (7)	1	B1	Condone one omission or error
	(b)	corresponding terms add to 11	1	B1	Accept a diagram indicating this
	(c)	325	1	B1	[3]
			1	C1 for communication by: Showing strategy Comparing Checking	Award mark for one of: Strategy shown for Question 2 Question 3(c) Question 3(e) Question 4 Indicating comparison of corresponding terms in Question 5(b) Checking a result. [1]
					[Total: 24]