Edexcel GCSE

Mathematics 2381
Paper 5381H/06

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Mark Scheme

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5381H/06 – Section A				
Question	Working	Answer	Mark	Notes
1 (a)	$1 - (0.3 + 0.2 + 0.1)$	0.4	2	M1 for $1 - $ "$(0.3 + 0.2 + 0.1)$" A1 for 0.4 oe (watch out for answers given only in table)
(b)	0.2 x 50	10	2	M1 for 0.2 x 50 A1 for cao SC B1 for 10/50
2 (a)		Overlapping intervals Time frame No 6+ (or none)	2	B2 for 2 correct731607245 (B1 for 1 correct)
(b)		Not representative of all ages Students use computers more	1	B1 for one acceptable reason
3	$(6 \times 5) + (11 \times 15) + (8 \times 25) + (5 \times 35) = 570$ "570" ÷ "(6+11+8+5)"	19	4	M1 for use of fx with x consistent within intervals (including end points) accept one error M1 (dep) for use of midpoints M1 (dep on 1st M1) for use of $\Sigma fx / \Sigma f$ A1 cao
4		2 comparisons	2	B1 for a comparison of a specific value, e.g. John's median is greater than Peter's median B1 for a comparison of spread, e.g. John's range is wider than Peter's range (watch out for two comparisons given together)

5381H/06 – Section A				
Question	Working	Answer	Mark	Notes
5	frequency densities 0.4, 0.6, 1.0, 0.6, 0.2	bars 3cm, 1cm high respectively	2	M1 for consistent correct use of fd or $1cm^2=2$ (may be implied by one correct bar) A1 for 2 correct bars

5381H/06 – Section B				
Question	Working	Answer	Mark	Notes
1 (a)		(67, 50), (70, 50), (75, 40), (80, 25)	2	B2 for 4 points plotted correctly (allow ±2mm tolerance) (B1 for 2 or 3 points plotted correctly)
(b)		As the price increases the number of cameras sold decreases	1	B1 for decrease in number sold with price. (accept negative correlation)
(c)		line of best fit	1	B1 for line within given limits passing between (70, 40) & (70, 55) and between (80, 15) & (80, 30)
(d)		35 – 39	1	B1 for 35 – 39 or ft their line of best fit from 74 (allow ±2 mm tolerance)
2 (a)		88	1	B1 for value in range 87 – 89
(b)		38	1	B1 for value in range 38 -39
(c)	57 – 20	37	2	B2 for 32 – 40 (B1 for using graph at 25 and 75; may be indicated by marks at 25 and 75)
3		Reason	1	B1 for indication of not enough trials
4 (a)		4/5 (7/10, 3/10) (1/10, 9/10)	2	B2 cao (B1 for 2 correct from 4/5, (7/10, 3/10), (1/10, 9/10))
(b)	$(1/5 \times 7/10) + (4/5 \times 1/10)$	11/50	3	M1 for $1/5 \times$ "7/10" or "4/5" $\times$ "1/10" oe selected M1 for $(1/5 \times 7/10) + (4/5 \times 1/10)$ oe A1 for 11/50 oe