International GCSE Mathematics

Values in quotation marks must come from a correct method previously seen unless clearly stated otherwise.

Q	Working	Answer	Mark	Notes
1 (a)		$5 < d \leq 10$	1	B1 allow 5 – 10 or 5 to 10 or $5 < d < 10$ or $5 \leq d \leq 10$ or $5 \leq d < 10$
(b)	$2.5 \times 26 + 7.5 \times 40 + 12.5 \times 16 + 17.5 \times 10 + 22.5 \times 8$ (= 920) or 65 + 300 + 200 + 175 + 180 (= 920) [lower bound products are: 0, 200, 160, 150, 160] [sum of lower bound products is: 670] [products using 3, 8, 13, 18, 23 are: 78, 320, 208, 180, 184] [sum of products using 3, 8, 13, 18, 23 is: 970] [upper bound products are: 130, 400, 240, 200, 200] [sum of upper bound products is: 1170]		4	M2 for at least **4** correct products added (need not be evaluated ie can be in the form $2.5 \times 26 + 7.5 \times 40 + \ldots$) If not M2 then award: M1 for consistent use of values within interval (including end points) for at least **4** products added (need not be evaluated ie can be in the form $5 \times 26 + 10 \times 40 + \ldots$) or correct midpoints used for at least **4** products and not added
	"920" ÷ "100"			M1 (dep on at least M1) Allow division by their Σf provided addition or total under column seen
	Correct answer scores full marks (unless from obvious incorrect working)	9.2		A1 oe eg $9\frac{1}{5}$ or $\frac{46}{5}$ SCB2 for answer of 6.7 or 9.7 or 11.7
				Total 5 marks