Section A

1		$\frac{\pi a^2}{4} + \frac{\pi ac}{2}$	1	
	1200000	Total power is 2	1	Dep
	L		2	
2	(a)	10	2	W1: $10^3 = 1000$ or $4 \times 15^2 = 900$
	(b) (i)	$3\sqrt{2}$	1	
	(ii)	6	1	Accept √36
			4	
	(a)	Reflection & no other transformation in $y = x$	1 1	Accept mirror image or mirrored
	(b)	Correct final image	3	W2: correct C W1: rotation anticlockwise After W0: W2: correct translation of their C W1 for each direction
	1		5	
4	(a) (i)	24	1	
	(ii)	19	1	
	(b)	(Section)B - higher median	1_	Ignore other reasons
		1	3	
5	(a) (i)	(x+5)(x+4)	2	M1: $(x \pm 5)(x \pm 4)$
	(ii)	-5, -4 seen	1	f.t. dep on M1 in (a)(i) accept in part (a)(i)
	(b)	Multiplication of equation {2} by 3 or Multiplication of equation {1} by 2 and multiplication of equation {2} by 7 Addition or subtraction of	M1	Accept 2 terms correct Dep. on first M1
		equations		Accept 2 terms correct
		$x = \frac{1}{2}, y = -2$	A1	Answer only: W1
	1		6	
6		Final answer $\frac{1}{12}$	2	M1: $\frac{5k}{60k}$ seen
			2	
7		-1, 0, 1, 2, 3, 4 and no others	3	W2: four of -2, -1, 0, 1, 2, 3, 4 and no others or W1: any two of -2, -1, 0, 1, 2, 3, 4 and no others or M1: $\frac{-5}{3} \le n \le 4$
	1		3	
			25	
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