Topic Test 1 Mark Scheme
Simultaneous equations - Higher

Q	Answer	Mark	Comments
1	$2x + y = 180$ and $x + y = 130$	B1	

Q	Answer	Mark	Comments
2	$4x + 2y = 26$	M1	$2x + 4y = 34$
	$x = 3$	A1	$y = 7$
	$y = 7$	A1ft	$x = 3$

Q	Answer	Mark	Comments
3	$2T + 4B = 600$	M1	
	$B = 90$ and $T = 120$	A1	
	£3.30	A1	

Q	Answer	Mark	Comments
4	$c + d = 22$	M1	oe
	$d - c = 3$	M1	oe
	$d = 13$	A1	DVD = 13
	$c = 9$	A1	CD = 9

Q	Answer	Mark	Comments
5	$6x + 9y = 210$ **and** $6x + 4y = 260$	M1	oe
	$5y = -50$	M1	oe
	$y = -10$	A1	
	$x = 50$	A1	

Q	Answer	Mark	Comments
6	$x^2 + x - 3 = 2x + 3$	M1	oe
	$x^2 - x - 6 = 0$	M1dep	oe
	$(x - 3)(x + 2) = 0$	M1dep	$\dfrac{--1 \pm \sqrt{(-1)^2 - (4 \times 1 \times -6)}}{2 \times 1}$
	$x = 3$ and $x = -2$	A1	
	$y = 9$ and $y = -1$	A1ft	ft their x values

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