

Q	Marking instructions	AO	Marks	Typical solution
7(a)	Obtains $50 \times 1.002^3 + 50 \times 1.002^2 + 50 \times 1.002$ with $(50 \times 1.002^2 + 50 \times 1.002 + 50) \times 1.002$ or better seen	2.1	R1	$T_3 = (50 \times 1.002^2 + 50 \times 1.002 + 50) \times 1.002$ $= 50 \times 1.002^3 + 50 \times 1.002^2 + 50 \times 1.002$
	Subtotal		1	

Q	Marking instructions	AO	Marks	Typical solution
7(b)(i)	Models the total as the sum to n terms of a geometric sequence Evidence for this could include at least two of a , r or n substituted into sum formula $a = 50.1$, $r = 1.002$, $n = 120$ Condone $a = 50$ or $n = 10$ or 119 PI by AWRT 6724, 6737, 6801 or 505.53	3.3	M1	$T_{120} = \frac{50.1(1 - 1.002^{120})}{1 - 1.002}$ $= 6787.1595\dots$ Total in account = £ 6 787
	Forms the correct expression for the correct total $(T_{120} =) \frac{50.1(1 - 1.002^{120})}{1 - 1.002} \text{ or } \sum_{x=1}^{120} 50 \times 1.002^x$	3.3	A1	
	Obtains £6 787, £6 787.15 or £6 787.16	3.2a	A1	
	Subtotal		3	

Q	Marking instructions	AO	Marks	Typical solution
7(b)(ii)	Makes a reasonable comment in context. For example: The interest rate is unlikely to remain fixed. Or May have needed to withdraw some amount. Or May change the monthly payments.	3.5b	E1	The interest rate is unlikely to remain fixed for the whole 10 years
	Subtotal		1	

	Question 7 Total		5	
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