

Question		Answer	Marks	AOs	Guidance	
6	(i)	<p>Arithmetic sequence with $a = 50$, $d = 20$</p> $S_{24} = \frac{24}{2}(2 \times 50 + (24 - 1)20)$ $= \text{£}6720$	<p>M1</p> <p>A1 [2]</p>	<p>1.1a</p> <p>1.1b</p>	<p>Using appropriate formula for sum of an arithmetic sequence with $a = 50$, $d = 20$</p> <p>Allow full credit for any correct method</p>	<p>Allow for total written out in full</p>
	(ii)	<p>Each month is 12% more than the previous, so multiplied by 1.12 giving a geometric sequence with $a = 50$, $r = 1.12$</p>	<p>E1 [1]</p>	<p>2.4</p>	<p>Clear argument must include the value 1.12</p>	
	(iii)	<p>Geometric sequence with $a = 50$, $r = 1.12$</p> $S_{24} = \frac{50(1.12^{24} - 1)}{0.12}$ $= \text{£}5907.76$ <p>which is less than Aleela</p>	<p>M1</p> <p>A1 E1 [3]</p>	<p>3.1a</p> <p>1.1b 2.1</p>	<p>Using appropriate formula for sum of a geometric sequence with $a = 50$, $r = 1.12$</p> <p>Allow any suitable rounding</p> <p>FT their values (dep on earning the M marks in part (i) and (iii))</p>	<p>Allow for total written out in full</p>