

## Growth and Decay - Topic test 2 - Foundation tier - Mark scheme

Q	Answer	Mark	Comments
1	$340 \times 0.45$	M1	
	153	A1	
1 Alt 1	10% is 34 $34 \times 4 = 136$ 5% is 17 $136 + 17$	M1	
	153	A1	
1 Alt 2	$340 \div 100 = 3.4$ $3.4 \times 45$	M1	
	153	A1	
2	$120 \times 1.2$	M1	
	144	A1	
2 Alt 1	$120 \div 10 = 12$ $12 \times 2 = 24$ $120 + 24$	M1	
	144	A1	
2 Alt 2	$120 \div 100 = 1.2$ $1.2 \times 120$	M1	
	144	A1	

<b>2 Alt 3</b>	120 ÷ 100 = 1.2 1.2 x 20 = 24 120 + 24	M1	
	144	A1	

<b>3</b>	125 000 x 1.04 <sup>5</sup>	M2	M1 for either 1.04 or power 5
	152081.61	A1	
	152 100	A1	

<b>4</b>	5 000 x 1.035 <sup>4</sup>	M1	
	5737.62 (- 5000)	A1	
	737.62	A1	

<b>5</b>	One calculation for Investments 4 You e.g. 8 000 x 1.03 <sup>3</sup> = 8741.82	M1	Investments 4 You 1 Year = 8240 2 Years = 8487.20 3 Years = 8741.82 4 Years = 9004.07 5 Years = 9274.19 6 Years = 9552.42
	One calculation for Make U Money using the same number of years e.g. 8 000 x 1.01 x 1.02 x 1.03 = 8488.85	M1 B1	M1 for calculation B1 for same number of years Make U Money 1 Year = 8080 2 Years = 8241.60 3 Years = 8488.85 4 Years = 8828.40 5 Years = 9269.82 6 Years = 9826.01
	At least one attempt at improvement	M1	
	6 years	A1	