

Paper: 1MA1/3H				
Question	Working	Answer	Mark	Notes
9 (a)		5	M1 A1	evaluates $(0.85)^n$ or $12\,500 \times (0.85)^n$ for at least one value of n cao
(b)		2.4	P1 P1 A1	for a process to find the amount of interest before tax, eg $79.20 \div 0.6 (= 132)$ for a process to find value of R , eg “132” \div 5500 \times 100 cao

Paper: 1MA1/2H				
Question	Working	Answer	Mark	Notes
6		Secure Bank (supported)	P1 P1 C1	for a process to work out the interest after one year e.g. $0.02 \times 25000 (=500)$ or $0.043 \times 25000 (=1075)$ or for 1.02 or 25500 or 1.043 or 26075 for process to find value of the investment after 3 years or the multiplicative factor for 3 years at one of the banks, e.g. $25000 \times 1.02 \times 1.02 \times 1.02$ oe ($= 26530\dots$) or $1.02^3 (=$ $1.0612\dots)$ or $25000 \times 1.043 \times 1.009 \times 1.009$ oe ($= 26546\dots$) or $1.043 \times 1.009 \times 1.009 (=$ $1.0618\dots)$ [accept total interest of 1530.. or 1546.. if final values of investment are not found] for Secure Bank from correct figures, eg. 26530.. and 26546.. or 1530... and 1546... or 1.0612... and 1.0618...

Paper 1MA1: 3H				
Question	Working	Answer	Mark	Notes
10		6 (%)	P1 P1 A1	for y^5 oe or $8029.35 \div 6000$ for a process to find $1+x$ e.g. $\sqrt[5]{(8029.35 \div 6000)}$ or 1.06 or 1.0599.. 5.99 to 6

Paper: 1MA1/3H				
Question	Answer	Mark	Mark scheme	Additional guidance
2	12272.70 12272.71 or 12272.72	M1 M1 A1	for evidence of using a correct first step eg $200000 \times 0.015 (= 3000)$ or $200000 \times 1.015 (= 203000)$ for evidence of a compound interest method eg $203000 \times 0.015 (= 3045)$ or $203000 \times 1.015 (= 206045)$ or $206045 \times 0.015 (= 3090.675)$ or $206045 \times 1.015 (= 209135.675)$ or $209135.675 \times 0.015 (= 3137.035\dots)$ or $209135.675 \times 1.015 (= 212272.710\dots)$ or $200000 \times 1.015^t, t \geq 2$ for 12272.7(0) or 12272.71 or 12272.72 SC B2 for 212272.7(0) or 212272.71 or 212272.72	values may be rounded or truncated to 2 dp

Paper: 1MA1/2H				
Question	Answer	Mark	Mark scheme	Additional guidance
10	344 580.48	P1	for a start to the process to find the initial investment eg $344\,605 \div 1.025$ oe (= 336 200) or for 1.025^3 (= 1.07689....)	[initial investment] must be clearly what they believe to be that and cannot be 344605
		P1	for complete process to find original investment, eg $344\,605 \div 1.025^3$ oe (= 319 078 to 320 265)	
		P1	for [initial investment] $\times 1.02^2 \times 1.035$ oe	
		A1	for answer in the range 343 587 to 344 581	

Paper: 1MA1/2H				
Question	Answer	Mark	Mark scheme	Additional guidance
4 (a)	Ben (supported)	P1	shows how to work interest out for one year eg $2000 \times 0.025 (= 50)$ or $1600 \times 0.035 (= 56)$ or 150 or 168 or $2000 \times 1.025 (= 2050)$ or $1600 \times 1.035 (= 1656)$	Throughout accept figures ± 1 pence which do not need to be presented in money notation (to 2dp) or with monetary symbols. Award mark for a correct process shown, for which these figures can be taken as implying the process. As above, award mark for both correct processes shown for both accounts, which these figures can be taken as implying the process. Accept an answer of "shares".
		P1	shows compound interest calculation for one account eg $2050 \rightarrow 51.25$ or $2101.25 \rightarrow 52.53$ or $1656 \rightarrow 57.96$ or $1713.96 \rightarrow 59.99$ eg $2000 \times 1.025^3 (= 2153.78)$ or $1600 \times 1.035^3 (= 1773.95)$	
		P1	shows complete compound interest calculation for both accounts eg $2000 \times 1.025^3 (= 2153.78)$ and $1600 \times 1.035^3 (= 1773.95)$ OR one interest stated correctly eg 153.78 or 173.95	
		C1	Ben (shares) supported by 153.78 and 173.95	
4 (b)	conclusion	C1	conclusion (ft) eg no change, shares now 182.5... Acceptable examples no since shares/Ben now 182.5 Still Ben since $182.5 > \text{Ali}$ No; he only gets 8.57 more No; he gets 68.56 instead of 59.98 (3 rd yr) No; Ben already gets more interest, he would just get even more Not acceptable examples no shares now 182.5 Still Ben since less than Ali $182.5 > 153.78$ no; he needs 20.17 more	Conclusion needs to be supported. ft is from part (a); calculations carried out as part of (b) need to be correct for the comparison to be valid.

Paper: 1MA1/2H				
Question	Answer	Mark	Mark scheme	Additional guidance
13	2.2	P1	works out interest for one year, eg $3550 \times 0.026 (= 92.3(0))$ or $3550 \times 1.026 (=3642.3(0))$	If an answer in the range is seen in working and then incorrectly rounded award full marks
		P1	for compound interest calculation, eg $3550 \times 1.026^2 (= 3736.9\dots)$ or for an answer given as 0.0219... or 1.0219...	
		A1	answer in range 2.19 to 2.2	

Paper: 1MA1/2H				
Question	Answer	Mark	Mark scheme	Additional guidance
6	7318.15	M1	for a correct first step eg working out increase for one year $7000 \times (100 + 3) \div 100 (= 7210)$ oe or $7000 \times 3 \div 100 (= 210)$ oe or find the multiplier for both years eg $(100 + 3) \div 100 \times (100 + 1.5) \div 100 (=1.04545)$	7315 or 315 implies M1
		M1	for a compound method, eg $7000 \times (100 + 3) \div 100 \times (100 + 1.5) \div 100$ oe or “7210” $\times 1.5 \div 100$ or $(= 108.15)$ oe	318.15 implies M1M1A0
		A1	cao	

Paper: 1MA1/2H				
Question	Working	Answer	Mark	Notes
13 (a)		58600	M1	for a complete method, eg 50000×1.02^8 (= 58582(.969...)) or for finding the increase in value of the company after 8 years, eg $8582(.969...)$ or 8600
			A1	cao
(b)		4.5	P1	for a process to find multiplier for 6 year period, eg $325 \div 250$ oe (= 1.3) or 130(%) or for $250000 \times y^6 = 325000$
			P1	for a process to find multiplier for one year, eg (" 1.3 ") $^{\frac{1}{6}}$ or 1.044...or 1.045
			A1	4.4 – 4.5