Finance Problems

Mark Scheme 2

Level	IGCSE
Subject	Maths (0580)
Exam Board	Cambridge International Examinations (CIE)
Paper Type	Extended
Topic	Number
Sub-Topic	Finance Problems
Booklet	Mark Scheme 2

Time Allowed: 60 minutes

Score: /50

Percentage: /100

Grade Boundaries:

A*	A	B	C	D	E	U
>85%	75%	60%	45%	35%	25%	<25%

1	(a)	6	3	**B2** for $5\frac{1}{4}$ or 5.25 shown in working isw **or M1** for $\frac{3}{4} \times 7$ soi by answer 5
	(b)	21.45 cao final answer	2	**M1** for 17.16 × 0.25 or 17.16 × 1.25
	(c)	16.5[0] nfww	3	**M2** for 17.16 ÷ 1.04 oe or **M1** for 17.16 associated with 104[%] oe isw
	(d)	1.34 cao final answer	2	**M1** for 13.32 ÷ 0.72 soi by 18.5[0] or for any correct complete longer method If zero scored, **SC1** for 0.96 [euros] seen
	(e) (i)	750	1	
	(ii)	4.7 cao	3	**B** for 4.658 to 4.66 or **M2** for $\sqrt{their\,(\mathbf{e})(\mathbf{i}) \div 11\pi}$ or **M1** for $11\pi r^2 = their\ (\mathbf{e})(\mathbf{i})$
	(iii)	6	2	**M1** for 2^3 or $\frac{1}{2^3}$ oe seen or for $\pi \times (2 \times their\ (\mathbf{e})(\mathbf{ii}))^2 \times 22$ If zero scored, **SC1** for answer 6 000
	(f)	8 950	1	
	(g)	210	2	**M1** for 0.07 × 3 000
	(h)	160 000	3	**M2** for $2 \times 60 \times 100^3 \div 750$ oe or **M1** for figs 16 as answer or 100^3 seen

2	(a)	$240 \div (5+7) \times 7$ [=140] oe	M2	**M** for $240 \div (5+7)$ or 240×7
	(b)	2 : 3 final answer	2	**B** for ratio of form $2x : 3x$ seen or **SC1** for 3 : 2
	(c)	144	3	**M2** for $120 + \dfrac{120 \times 4 \times 5}{100}$ oe or **M1** for $\dfrac{120 \times 4 \times 5}{100}$
	(d)	89.99 cao mark final answer	3	**B** for 89.9[8…] shown but not spoiled or answer 90[.0..] nfww or **M1** for $80 \times \left(\dfrac{104}{100}\right)^3$ oe If **M1** spoiled by adding 80 or subtracting 80 then **SC1** for answers 169.99 or 9.99
	(e)	4.08	3	**M2** for $\dfrac{200 \times r \times 2}{100} = 200 \times 1.04^2 - 200$ oe or **M1** for 200×1.04^2 [216.3[2]] oe or $\dfrac{200 \times r \times 2}{100}$ oe

3	134	3	**M2** for $\dfrac{20.1 \times 100}{3 \times 5}$ oe or **M1** for $\dfrac{x \times 3 \times 5}{100} = 20.1$ or 3% = 4.02 oe If 0 scored **SC1** for answer of figs 134

4	10[.00]		3	**M** for 1.90 and 2.90 and 5.20 only or **M1** for two of 1.90, 2.90, 5.20 in a list of three or two values from the table or **SC1** FOR 1.90, 2.90, 4.30 $\left[\text{from } \dfrac{3.40 + 5.20}{2}\right]$

5	**(a)**	$\dfrac{2}{5}$ cao	1	
		(ii) 3 : 2 cao	1	
	(b)	**(i)** 1.22	2	**M1** for 86.38 – 28 × 1.56
		(ii) 1.3 [0] nfww	3	**M** for 1.56 ÷ 1.2 oe **or M1** for 1.56 = 120% soi
	(c)	33.6[0]	2	**M** for (667 – 314.2) ÷ 10.5 oe