



# 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%

<b>1</b>	<b>(a)</b>	6	<b>3</b>	<b>B2</b> for $5\frac{1}{4}$ or 5.25 shown in working isw <b>or M1</b> for $\frac{3}{4} \times 7$ soi by answer 5
	<b>(b)</b>	21.45 cao final answer	<b>2</b>	<b>M1</b> for $17.16 \times 0.25$ or $17.16 \times 1.25$
	<b>(c)</b>	16.5[0] nfw	<b>3</b>	<b>M2</b> for $17.16 \div 1.04$ oe or <b>M1</b> for 17.16 associated with 104[%] oe isw
	<b>(d)</b>	1.34 cao final answer	<b>2</b>	<b>M1</b> for $13.32 \div 0.72$ soi by 18.5[0] or for any correct complete longer method If zero scored, <b>SC1</b> for 0.96 [euros] seen
	<b>(e) (i)</b>	750	<b>1</b>	
	<b>(ii)</b>	4.7 cao	<b>3</b>	<b>B</b> for 4.658 to 4.66 or <b>M2</b> for $\sqrt{\text{their (e)(i)} \div 11\pi}$ or <b>M1</b> for $11\pi r^2 = \text{their (e)(i)}$
	<b>(iii)</b>	6	<b>2</b>	<b>M1</b> for $2^3$ or $\frac{1}{2^3}$ oe seen or for $\pi \times (2 \times \text{their (e)(ii)})^2 \times 22$  If zero scored, <b>SC1</b> for answer 6 000
	<b>(f)</b>	8950	<b>1</b>	
	<b>(g)</b>	210	<b>2</b>	<b>M1</b> for $0.07 \times 3\ 000$
	<b>(h)</b>	160 000	<b>3</b>	<b>M2</b> for $2 \times 60 \times 100^3 \div 750$ oe or <b>M1</b> for figs 16 as answer or $100^3$ seen

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

3	134	<b>3</b>	<b>M2</b> for $\frac{20.1 \times 100}{3 \times 5}$ oe or <b>M1</b> for $\frac{x \times 3 \times 5}{100} = 20.1$ or $3\% = 4.02$ oe  If 0 scored <b>SC1</b> for answer of figs 134
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4	10[.00]	<b>3</b>	<p><b>M</b> for 1.90 and 2.90 and 5.20 only  or <b>M1</b> for two of 1.90, 2.90, 5.20 in a list of three or two values from the table</p> <p>or <b>SC1</b> FOR 1.90, 2.90, 4.30 <math>\left[ \text{from } \frac{3.40 + 5.20}{2} \right]</math></p>
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5	<p><b>(a)</b> <math>\frac{2}{5}</math> cao</p> <p><b>(ii)</b> 3 : 2 cao</p> <p><b>(b) (i)</b> 1.22</p> <p><b>(ii)</b> 1.3 [0] nfww</p> <p><b>(c)</b> 33.6[0]</p>	<p><b>1</b></p> <p><b>1</b></p> <p><b>2</b></p> <p><b>3</b></p> <p><b>2</b></p>	<p><b>M1</b> for <math>86.38 - 28 \times 1.56</math></p> <p><b>M</b> for <math>1.56 \div 1.2</math> oe  or <b>M1</b> for <math>1.56 = 120\%</math> soi</p> <p><b>M</b> for <math>(667 - 314.2) \div 10.5</math> oe</p>
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