

M1.

100(%) – 14(%) or 86(%)
or $1 - 0.14$ or 0.86

Implied by 87 139(.5)

M1

$101\,325 \times 0.86^4$

oe

eg $101\,325 \times 0.86$ or $87\,139(.5)$

and their $87\,139(.5) \times 0.86$ or $74\,939(.97)$

and their $74\,939(.97) \times 0.86$ or $64\,448(.3742)$

and their $64\,448(.3742) \times 0.86$

A1

55 425(...)

May be implied by 55 000 or 55 400 or 55 430 or 55 426

A1

55 000

ft their answer rounded to 2sf

B1ft**[4]****M2.** 1800×1.04 or 1872 *oe*

$1800 \times 1.04^n = 2000$

M1

1800×1.04^2 or 1946.88 or 1946 or 1947 *oe*

Accept rounding [1946, 1947]

$2000 \div 1800 = 1.04^n$

M1dep

1800×1.04^3 or 2024.7 ... *oe*

Accept [2023, 2025]
Between 2 and 3 years

M1dep

3

Must not come from simple interest

A1

[4]

M3.Alternative Method 1

1.032 seen

M1

5000 \times 1.032³ oe

M1

5495.523...

May be implied

A1

5495.52

*ft their answer rounded to 2 dp
SC1 5480*

B1ft

Alternative method 25000 + 5000 \times 0.032 or 5160 oe

M1

their 5160 + their 5160 \times 0.032

or 5325.12

and

their $5325.12 +$ their 5325.12×0.032

M1

5495.523...

May be implied

A1

5495.52

ft their answer rounded to 2 dp
SC1 5480

B1ft

[4]

M4.1.05 seen oe

B1

$9\ 000 \div 1.05^3$

$9\ 000 \div 1.05 (= 8571.(\dots))$

M1

their $8571.(\dots) \div 1.05 (= 8163.(\dots))$

their $8163.(\dots) \div 1.05 (= 7774.(\dots))$

M1

7774.54 or 7774.55 or 7775

A1

Alternative method

1.05 seen oe

B1

Two trials correctly evaluated of the form $n \times 1.05^3$ with second trial closer to £9000

M1

Two trials correctly evaluated of the form $n \times 1.05^3$ with second trial closer to £9000

and

both values of n in range [7700, 7800]

M1

7774.54 or 7774.55 or 7775

A1

[4]

M5.(a) $1(.0) \times 10^{-6}$

B1

(b) 50 000 000 000 000

B1

(c) $4^3 = 2^6$

$$2^{10} = 4^5$$

M1

their $2^6 \times 2 \times 2 \times 2 \times 2$

$$4^5 \div 4 \div 4$$

For this mark the correct number of 2s or 4s needed for their 2^6 or their 4^5

M1

5

SC1 answer only

A1

Alternative method 1

64 and 128

Allow one arithmetical slip when multiplying by 2.

M1

64, 128, 256, 512 and 1024

Allow one arithmetical slip when multiplying by 2.

M1dep

5

*If one arithmetical slip then A0
SC1 answer only*

A1

Alternative method 2

64 and 1024

M1

$1024 \div 64 = 16$ oe

M1

5

SC1 answer only

A1

[5]