R10. Percentages Simple Interest

OCR

7 George invests £15 000 at 4.5% per year simple interest.

Find the total value of his investment after 3 years.

£ .....**[3]**

7 George invests £15 000 at 4.5% per year simple interest.

Find the total value of his investment after 3 years.

4.5% of £5000 = £675

× 3

£2025

+

£ 17025 **[3]**

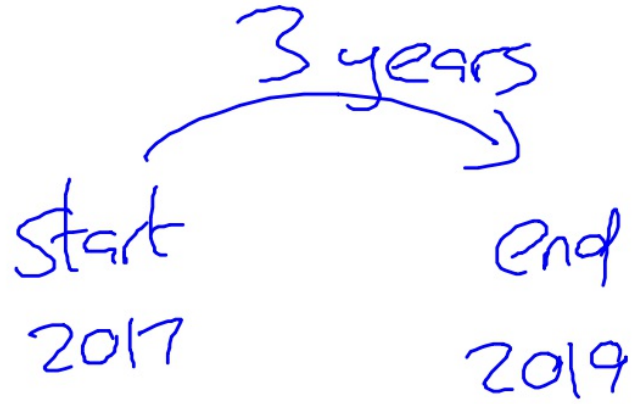
7 At the start of 2017 there are 4000 fish in a lake.
Each year, the number of fish increases by 20% of 4000.

Find the number of fish at the end of 2019.

..... **[3]**

7 At the start of 2017 there are 4000 fish in a lake.
Each year, the number of fish increases by 20% of 4000.

Find the number of fish at the end of 2019.



20% of 4000

= 800 every year

3 years x 800
= 2400 fish

4000 + 2400

6400 fish

..... [3]

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2 Corinne invests £8400 at a simple interest rate of 12% per year.

Work out the value of the investment after 3 years.

£ ..... **[3]**

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12% x 3

2 Corinne invests £8400 at a simple interest rate of 12% per year.

Work out the value of the investment after 3 years.

12% of £8400 = £1008 x 3 years

= £3024

Ans... £8400 + £3024

£ 11,424 ✓ **[3]**

23 Here are the interest rates for two bank accounts.

R10
R11

Northern Savings Bank (NSB)	Central Alliance Bank (CAB)
2.5% per year **compound interest**	2.7% per year **simple interest**

Mia puts £6400 in each account.

Calculate the difference in value between the two accounts after 8 years.
Give your answer correct to the nearest penny.

£ ..... **[6]**

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23 Here are the interest rates for two bank accounts.

R10
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Northern Savings Bank (NSB)	Central Alliance Bank (CAB)
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Mia puts £6400 in each account.

Calculate the difference in value between the two accounts after 8 years.
Give your answer ~~correct~~ to the nearest penny.

6400×1.025^8

$= £7797.78$

2.7% of £6400 $= £172.80$

$\times 8$

$+ £1382.40$

$= £7782.40$

£ 15.38 ✓ **[6]**

7 Gustavo invests £520 for 6 years in a bank account paying simple interest.
At the end of 6 years, the amount in the bank account is £629.20.

R6
R10 Calculate the annual rate of interest.

..... % **[4]**

7 Gustavo invests £520 for 6 years in a bank account paying simple interest.
At the end of 6 years, the amount in the bank account is £629.20.

R6
R10 Calculate the annual rate of interest.

Int for 6 years

= 629.20
- 520.00
£109.20 ... 1 yr (÷6)

18.20 interest in one year.

$\frac{\text{diff}}{\text{original}} = \frac{18.20}{520}$

$= 0.035$

3.5 ..... % **[4]**

Edexcel

9 Becky invests £5000 for 2 years in a bank account.
She gets simple interest at a rate of 3% per year.

Work out the total amount of interest Becky gets by the end of 2 years.

£.....

(Total for Question 9 is 2 marks)

9 Becky invests £5000 for 2 years in a bank account.
She gets simple interest at a rate of 3% per year.

Work out the total amount of interest Becky gets by the end of 2 years.

3% of £5000 = £150 x 2

2 years x £150 = £300

£ 300

(Total for Question 9 is 2 marks)

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15 Remi invests £600 for 5 years in a savings account.
By the end of the 5 years he has received a total of £75 simple interest.

R10

Work out the annual rate of simple interest.

.....%

(Total for Question 15 is 3 marks)

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15 Remi invests £600 for 5 years in a savings account.
By the end of the 5 years he has received a total of £75 simple interest.

R10

Work out the annual rate of simple interest.

£75 = 5 years ÷5
£15 = 1 year ÷5

$\frac{£15}{£600} = 0.025$

×100

2.5

2.5 %

(Total for Question 15 is 3 marks)

AQA

14 £1700 is invested for 3 years at 4% per year **simple** interest.

R10 Work out the total interest.

[3 marks]

Answer £ _____

14 £1700 is invested for 3 years at 4% per year **simple** interest.

R10 Work out the total interest.

[3 marks]

4% of 1700 = £68

Int for 3 yrs = £68 x 3

= £204

Answer £ 204