

Simple Interest

1

£400 is invested at 3% simple interest a year for 5 years. Find the total interest.

Year 1	Year 2	Year 3	Year 4	Year 5
£12	£12	£12	£12	£12

interest for one year

$$3\% \text{ of } £400 = £12$$

the same every year

$$£12 \times 5 = £60$$

Answer £60

2

£200 is invested at 5% simple interest a year for 3 years. Find the total interest.

Year 1	Year 2	Year 3
£10	£10	£10

interest for one year

$$5\% \text{ of } £200 = £10$$

the same every year

$$£10 \times 3 = £30$$

Answer £30

3

£500 is invested at 2% simple interest a year for 4 years. Find the total interest.

Year 1	Year 2	Year 3	Year 4
£10	£10	£10	£10

interest for one year

$$2\% \text{ of } £500 = £10$$

the same every year

$$£10 \times 4 = £40$$

Answer £40

4

£300 is invested at 4% simple interest a year for 6 years. Find the total interest.

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
£12	£12	£12	£12	£12	£12

interest for one year

$$4\% \text{ of } £300 = £12$$

the same every year

$$£12 \times 6 = £72$$

Answer £72

5

£800 is invested at 2.5% simple interest a year for 2 years. How much is it worth at the end?

Year 1	Year 2
£20	£20

interest for one year

$$2.5\% \text{ of } £800 = £20$$

the same every year

$$£20 \times 2 = £40$$

add it to the start

$$£800 + £40 = £840$$

Answer £840

6

£1200 is invested at 3% simple interest a year for 5 years. How much is it worth at the end?

Year 1	Year 2	Year 3	Year 4	Year 5
£36	£36	£36	£36	£36

$$3\% \text{ of } £1200 = £36$$

$$£36 \times 5 = £180$$

$$£1200 + £180 = £1380$$

Answer £1380

7

£650 is invested at 4% simple interest a year for 3 years. How much is it worth at the end?

$$4\% \text{ of } £650 = £26, \times 3 = £78$$

Answer £728

8

£2500 is invested at 1.5% simple interest a year for 4 years. How much is it worth at the end?

$$1.5\% \text{ of } £2500 = £37.50, \times 4 = £150$$

Answer £2650

Simple Interest *further practice*

9

£1800 is invested at 3.5% simple interest a year for 4 years. How much is it worth at the end?

$$3.5\% \text{ of } £1800 = £63, \times 4 = £252$$

Answer £2052

10

£500 is invested at 6% simple interest a year. Complete the table to show how much it is worth.

End of year 1	End of year 2	End of year 3
£530	£560	£590

$$6\% \text{ of } £500 = £30 \text{ each year}$$

Answer £530, £560, £590

11

Ravi puts £1200 in a savings account that pays 3% simple interest a year. How much interest does he earn in 6 months?

$$3\% \text{ of } £1200 = £36 \text{ a year, } \div 2$$

Answer £18

12

Kim wants to save £1500 in one bank for 4 years. Bank A pays 3.5% simple interest a year. Bank B pays 4% simple interest a year, then takes a £25 fee at the end. Which bank would leave Kim with more money at the end?

$$A: £1710, B: £1740 - £25$$

Answer Bank B (£1715)

13

£800 is invested at 5% simple interest a year. After how many years will the total interest be £200?

$$5\% \text{ of } £800 = £40 \text{ a year, } 200 \div 40$$

Answer 5 years

14

£400 is invested for 3 years at a simple interest rate. It earns £48 interest in total. What is the rate of interest each year?

$$£48 \div 3 = £16 \text{ a year, } 16 \div 400 \times 100$$

Answer 4%

15

Mo borrows £2400 for 2 years at 6% simple interest a year. He pays back the £2400 and the interest in 24 equal monthly payments. How much is each payment?

$$£2400 + £288 = £2688, \div 24$$

Answer £112

16

£500 is invested at 4% simple interest a year. After 2 years it is worth £540. Tom says that after 4 years it will be worth twice as much, £1080. Is Tom right? Explain.

$$\text{only the interest doubles: } £40 \text{ to } £80$$

Answer No, it is worth £580