National 5 Mathematics

Percentages - Questions

Marks are indicated in brackets after each question number

2014 Paper 1 Question 9, (3)

480 000 tickets were sold for a tennis tournament last year.

This represents 80% of all the available tickets.

Calculate the total number of tickets that were available for this tournament.

2014 Paper 2 Question 1, (3)

There are 964 pupils on the roll of Aberleven High School.

It is forecast that the roll will decrease by 15% per year.

What will be the expected roll after 3 years?

Give your answer to the nearest ten.

2015 Paper 2 Question 1, (3)

A house is valued at £240 000.

Its value is predicted to rise by 2·8% per annum.

Calculate its predicted value after 2 years.

2015 Paper 2 Question 8, (3)

James paid £297·50 for a laptop in a sale.

The discount in the sale was 15%.

Calculate the original price of the laptop.

2016 Paper 2 Question 1, (3)

A drinks manufacturer is reducing the sugar content of one of their fizzy drinks by 8% per year over the next 3 years.

The sugar content of a standard can is currently 35 grams.

Calculate the sugar content of a standard can after 3 years.

2017 Paper 2 Question 2, (3)

A necklace is valued at £1200.

Its value is expected to increase by 4·5% per year over the next 3 years.

Calculate the expected value of the necklace after this time.

Give your answer to the nearest pound.

2017 Paper 2 Question 5, (3)

A theatre group sold 4830 tickets for their show.

This was 15% more than they sold last year.

How many tickets did they sell last year?

2018 Paper 2 Question 1, (3)

Households in a city produced a total of 125 000 tonnes of waste in 2017.

The total amount of waste is expected to fall by 2% each year.

Calculate the total amount of waste these households are expected to produce in 2020.

2019 Paper 2 Question 1, (3)

A charity distributed 80 000 emergency packages during 2018.

This number is expected to increase by 15% each year.

Calculate how many emergency packages the charity expects to distribute in 2021.

2019 Paper 2 Question 9, (3)

Georgie had her roof repaired.

She was charged an extra 2·5% for late payment.

She had to pay a total of £977·85.

Calculate how much she would have **saved** if she had paid on time.

2022 Paper 1 Question 10, (3)

Tommy buys flower seeds from a website.

Tommy is given a 30% discount. He pays £16.10 for the seeds.

Calculate the cost of the flower seeds without the discount.

2022 Paper 2 Question 2, (3)

A company's annual profit at the end of 2021 was £215,000.

The profit is expected to increase by 3% each year.

Calculate the company's expected annual profit by the end of 2025.

Give your answer correct to the nearest thousand pounds.

2023 Paper 2 Question 1, (3)

A caravan was bought for £20,000.

It depreciated by 11% in the first year.

It then depreciated by a further 6% each year over the next two years.

Calculate the value of the caravan three years after it was bought.

2023 Paper 2 Question 6, (3)

Nadim bought a flat last year.

The value of the flat has increased by 8% and it is now worth £94,500.

Calculate how much Nadim paid for the flat.

2024 Paper 2 Question 1, (3)

Dougie pays £460 for a new laptop.

It is expected that the value of the laptop will depreciate by 26% each year.

Calculate the expected value of Dougie's laptop after 3 years.

2024 Paper 2 Question 5, (3)

This year the cost of Charley's car insurance is £278.40.

This is an increase of 16% on last year's cost.

Calculate the cost of Charley's insurance last year.

2025 Paper 1 Question 4, (3)

In a sale, the price of a wedding dress is reduced by 20%.

The sale price of the dress is £720.

Calculate the price of the dress before the sale.

2025 Paper 2 Question 1, (3)

The number of visitors to a zoo in 2024 was 118 750.

The number of visitors is expected to increase by 4% each year over the next two years.

Calculate the expected number of visitors in 2026.