

**Percentages Past Paper Questions GCSE Edexcel – Non Calculator**

1.

A bonus of £2100 is shared by 10 people who work for a company.  
40% of the bonus is shared equally between 3 managers.  
The rest of the bonus is shared equally between 7 salesmen.

One of the salesmen says,

“If the bonus is shared equally between all 10 people I will get 25% more money.”

Is the salesman correct?

You must show how you get your answer.

2.

Jack and Sadia work for a company that sells boxes of breakfast cereal.

The company wants to have a special offer.

Here is Jack’s idea for the special offer.

Put 25% more cereal into each box and do **not** change the price.

Here is Sadia’s idea.

Reduce the price and do **not** change the amount of cereal in each box.

Sadia wants her idea to give the same value for money as Jack’s idea.

By what percentage does she need to reduce the price?

3.

Jules buys a washing machine.

20% VAT is added to the price of the washing machine.

Jules then has to pay a total of £600

What is the price of the washing machine with **no** VAT added?

4.

A shop has a sale.

Microwave ovens $\frac{1}{3}$ off normal price
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Combination ovens 40% off normal price
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A microwave oven has a sale price of £90

A combination oven has a sale price of £84

Which of these ovens has the greater normal price?

You must show all your working.

5.

In a shop, all normal prices are reduced by 20% to give the sale price.

The sale price of a TV set is then reduced by 30%.

Mary says,

“ $30 + 20 = 50$ , so this means that the normal price of the TV set has been reduced by 50%.”

Is Mary right?

You must give a reason for your answer.

6.

Sean wants to go on holiday.

He is going to get a loan of £720 to help pay for the holiday.

Sean will have to pay back the £720 plus interest of 15%.

He will pay this back in 12 equal monthly installments.

How much money will Sean pay back each month?

7.

Karen got 32 out of 80 in a maths test.

She got 38% in an English test.

Karen wants to know if she got a higher percentage in maths or in English.

Did Karen get a higher percentage in maths or in English?

8.

Ria is going to buy a caravan.

The total cost of the caravan is £7000 **plus** VAT at 20%.

Ria pays a deposit of £3000

She pays the rest of the total cost in 6 equal monthly payments.

Work out the amount of each monthly payment.

9.

Mr Brown and his 2 children are going to London by train.

An adult ticket costs £24

A child ticket costs £12

Mr Brown has a Family Railcard.

**Family Railcard gives**

$\frac{1}{3}$  off adult tickets

60% off child tickets

Work out the total cost of the tickets when Mr Brown uses his Family Railcard.

10.

Mr Mason asks 240 Year 11 students what they want to do next year.

15% of the students want to go to college.

$\frac{3}{4}$  of the students want to stay at school.

The rest of the students do not know.

Work out the number of students who do not know.

11 Greg sells car insurance and home insurance.

The table shows the cost of these insurances.

<b>Insurance</b>	car insurance	home insurance
<b>Cost</b>	£200	£350

Each month Greg earns

£530 basic pay

5% of the cost of all the car insurance he sells

and 10% of the cost of all the home insurance he sells

In May Greg sold

6 car insurances

and 4 home insurances

Work out the total amount of money Greg earned in May.

12.

Railtickets and Cheaptrains are two websites selling train tickets.

Each of the websites adds a credit card charge and a booking fee to the ticket price.

**Railtickets**

Credit card charge: 2.25% of ticket price

Booking fee: 80 pence

**Cheaptrains**

Credit card charge: 1.5% of ticket price

Booking fee: £1.90

Nadia wants to buy a train ticket.

The ticket price is £60 on each website.

Nadia will pay by credit card.

Will it be cheaper for Nadia to buy the train ticket from Railtickets or from Cheaptrains?