



# EXAM PAPERS PRACTICE

GCSE OCR Math J560

Basic Percentage

Question Paper

*"We will help you to  
achieve A Star "*



### Question 1

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.

[4 marks]

### Question 2

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.

[4 marks]



**Question 3**

Celina and Zoe both sing in a band.

One evening the band plays for 80 minutes.

Celina sings for 65% of the 80 minutes.

Zoe sings for  $\frac{5}{8}$  of the 80 minutes.

Celina sings for more minutes than Zoe sings.

Work out for how many more minutes.

You must show all your working.

[4 marks]

**Question 4**

George wants to watch all 23 games that a football team will play at home next season.

He can buy

a season ticket costing £425

or 23 separate tickets costing £24 each ticket.

What percentage of the total cost of 23 separate tickets does George save by buying a season ticket?

[3 marks]



**Question 5**

Emily buys a pack of 12 bottles of water.  
The pack costs £5.64

Emily sells all 12 bottles for 50p each.

Work out Emily's percentage profit.  
Give your answer correct to 1 decimal place.

[3 marks]

**Question 6**

Bill's weight decreases from 64.8 kg to 59.3 kg.

Calculate the percentage decrease in Bill's weight.  
Give your answer correct to 3 significant figures.

[3 marks]

**Question 7**

Sasha takes a music exam.

The table shows the result that Sasha can get for different percentages in her music exam.

| Percentage | Result      |
|------------|-------------|
| 50% – 69%  | Pass        |
| 70% – 84%  | Merit       |
| 85% – 100% | Distinction |

Sasha gets 62 out of 80 in her music exam.

What result does Sasha get?  
You must show your working.

[3 marks]



### Question 8

A company sells boxes to factories.  
Fred buys boxes.  
The boxes are sold in packs of 1000  
Each pack costs £193.86

Fred orders 3 packs of boxes.  
He gets a discount on his total order.

The table shows the discount he will get.

| Total Order    | Discount |
|----------------|----------|
| £100 - £300    | 5%       |
| £301 - £400    | 10%      |
| £401 and above | 15%      |

Work out the total cost of the order after the discount.  
You must show your working.

[5 marks]

### Question 9

Mr Watkins needs to buy some oil for his central heating.

Mr Watkins can put up to 1500 litres of oil in his oil tank.  
There are already 850 litres of oil in the tank.  
Mr Watkins is going to fill the tank with oil.

The price of oil is 67.2p per litre.  
Mr Watkins gets 5% off the price of the oil.

How much does Mr Watkins pay for the oil he needs to buy?

[5 marks]



**Question 10**

The table gives some information about student attendance at a school on Friday.

| Year    | Number of students |        |       |
|---------|--------------------|--------|-------|
|         | Present            | Absent | Total |
| Year 7  | 192                | 16     | 208   |
| Year 8  | 219                | 22     | 241   |
| Year 9  | 234                | 28     | 262   |
| Year 10 | 233                | 28     | 261   |
| Year 11 | 214                | 24     | 238   |

The school has a target of 94% of students being present each day.

Did the school meet its target on Friday?

[3 marks]



**Question 11**

The table gives information about Ali's spending last month.

| Item      | Percentage of total spending |
|-----------|------------------------------|
| rent      | 30%                          |
| food      | 15%                          |
| transport | 12%                          |
| other     | 43%                          |

Ali's total spending last month was £800

Next month Ali's rent, in pounds, is going to rise by 20%.  
His total spending will still be the same.

Express the amount of money Ali will spend on rent next month as a percentage of £800

**[3 marks]**



**Question 12**

30% of the people at a concert are female.

1295 of the people at the concert are male.

Work out the number of people at the concert who are female.

[3 marks]

**Question 13**

In a company, the ratio of the number of men to the number of women is 3 : 2

40% of the men are under the age of 25

10% of the women are under the age of 25

What percentage of all the people in the company are under the age of 25?

[4 marks]





**Question 14**

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.

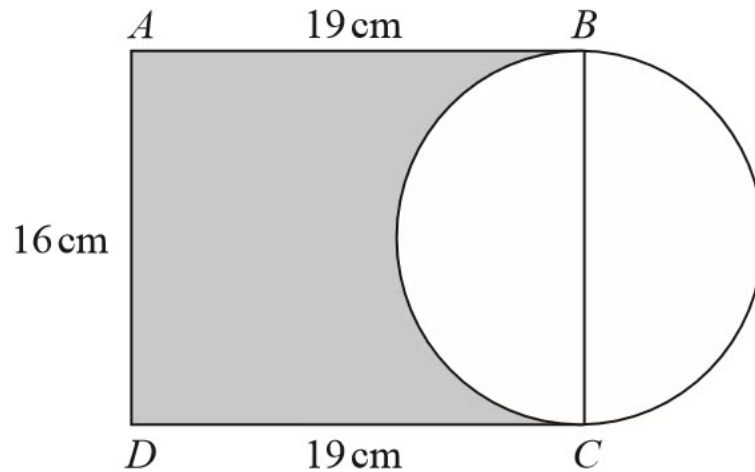
Will it be cheaper for Nadia to buy the train ticket from Railtickets or from Cheaptrains?

**[4 marks]**



**Question 15**

Here is a diagram showing a rectangle,  $ABCD$ , and a circle.



$BC$  is a diameter of the circle.

Calculate the percentage of the area of the rectangle that is shaded.  
Give your answer correct to 1 decimal place.

[4 marks]