

N134 Percentages 2

Q1.

Irena sells ice creams.

One day she sells 80 ice creams.

The next day she sells 108 ice creams.

Work out the percentage increase in the number of ice creams she sells.

..... %

(Total for question = 3 marks)

Q2.

A and B are two companies.

The table shows some information about the sales of each company and the number of workers for each company in 2004 and in 2014

	Company A		Company B	
	Sales (£ millions)	Number of workers	Sales (£ millions)	Number of workers
2004	320	2960	48	605
2014	388	3200	57	640

(a) Work out the percentage increase in sales from 2004 to 2014 for Company A.

..... %
(2)

(b) Which company had the most sales per worker in 2014, Company A or Company B?
You must show how you get your answer.

(3)

(Total for question = 5 marks)

Q3.

$$\text{pressure} = \frac{\text{force}}{\text{area}}$$

A force of 70 newtons acts on an area of 20 cm²

The force is increased by 10 newtons. The area is increased by 10 cm²

Helen says,

"The pressure decreases by less than 20%"

Is Helen correct?

You must show how you get your answer.

(Total for question = 3 marks)

Q4.

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.

..... %

(Total for question = 3 marks)

Q5.

Riddington and Greenwich are two small villages.

The population of Riddington has increased from 80 people to 120 people.

The population of Greenwich has decreased from 200 people to 120 people.

Show that Riddington has had the greater percentage change in its population.
You must show all your working.

(Total for question = 3 marks)

Q6.

A cooker costs £650 plus 20% VAT.

(a) Calculate the total cost of the cooker.

£
(3)

A washing machine has a price of £260

In a sale its price is reduced by £39

(b) Write the reduction as a percentage of the price.

..... %
(2)

3 kitchen chairs cost a total of £44.79

(c) Work out the total cost of 8 of these chairs.

£
(2)

(Total for Question is 7 marks)

Q7.

In a sale, the normal price of a book is reduced by 30%.
The sale price of the book is £2.80

Work out the normal price of the book.

£

(Total for question = 2 marks)

Q8.

In a sale, normal prices are reduced by 20%.
The normal price of a coat is reduced by £15

Work out the normal price of the coat.

£

(Total for question = 2 marks)

Q9.

Claire is making a loaf of bread.

A loaf of bread loses 12% of its weight when it is baked.

Claire wants the baked loaf of bread to weigh 1.1 kg.

Work out the weight of the loaf of bread before it is baked.

..... kg

(Total for question = 3 marks)