

Name:

Date:

# Calculation Problems (Non-Calculator)

## GCSE

Edexcel  
Mathematics  
Grade (9-1)

Mark

Score (%)

56
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### Materials

For this paper you must have:

- Ruler
- Pencil, Rubber, Protractor and Compass
- Scientific calculator, which you are expected to use when appropriate

### Instructions

- Answer all questions
- Answer questions in the space provided
- All working must be shown
- Do all rough work in this book. Cross out any rough work you don't want to be marked

### Information

- The marks for the questions are shown in brackets

1 Jacob goes to a stationery shop.

He buys:

- 2 pens at £4.30 each
- 4 pencils at £1.90 each
- 5 erasers at £0.80 each

He pays £50 to the shopkeeper.

Work out the change that he receives.

£.....

**(Total for question 1 is 3 marks)**

2 Hannah wants to buy 12 paper cups.

Each paper cup costs 16p

Hannah pays with a £10 note.

(a) Work out how much change Hannah will get from £10.

£.....

(2)

Later, Hannah finds out that the price of the paper cups has been increased.

(b) How does this affect the amount of change he will get?

.....

.....

(1)

**(Total for question 2 is 3 marks)**

3 Rebecca bought 12 kg apples, 1 kg onions, 15 kg lettuce and 500g cheese.

Price List
Apples: £3.25 per kg
Onions: £1.80 per kg
Lettuce: 5 kg for £8
Cheese: 3p per gram

What is the total money that Rebecca spent?

.....  
**(Total for question 3 is 2 marks)**

4 Rachel bought 12 diaries, 4 pens, 14 pencils and 4 packs of crayons.

- Each diary costs £4.60
- Each pen costs £1.60
- Each pencil costs 48p
- Each pack of crayons costs £9.98

What is the total money that Rachel spent?

.....  
**(Total for question 4 is 3 marks)**

5 Emily is buying a car worth £30,000.

She pays £7,500 up front and the remaining amount in monthly installments.  
Each installment is of £500.

For how many months will Emily pay the installments?

.....  
**(Total for question 5 is 3 marks)**

6 Kara is buying a house worth £50,000.

She pays £18,500 as a down payment and the remaining amount in monthly installments.  
Each installment is of £1500.

How many monthly installments will Kara pay?

.....  
**(Total for question 6 is 3 marks)**

**7** Sam buys 2 sandwiches and 3 coffees for £7.85.  
Dean buys 4 coffees for £7.80.

What is the cost of buying 3 sandwiches and 1 coffee?

.....  
**(Total for question 7 is 4 marks)**

**8** Laura buys 4 pens and 3 pencils for £10.90.  
A pack of 10 pens costs £16.

What is the cost of buying 3 pens and 5 pencils?

.....  
**(Total for question 8 is 4 marks)**

**9** Samantha needs to buy 3 kg of cherries, 5 kg of blueberries and 7 kg of green apples.  
The price list is shown below:

<b>Price List</b>	
Cherries:	£3.50 per kg
Blueberries:	£8 per kg
Green apples:	£4.80 per kg

Samantha only has £100.  
Does she have enough money?

.....  
**(Total for question 9 is 3 marks)**

**10** 2 calculators cost £9.80.  
3 pens cost £6.66.

Mr. Smith wants to buy 15 calculators and 15 pens.  
He only has £100.

Does Mr. Smith have enough money to buy 15 calculators and 15 pens?  
You must show your working.

.....  
**(Total for question 10 is 3 marks)**

**11** A string is 550 cm long.

Josh cuts three 20 cm lengths off the string.  
He then cuts the rest into as many 35 cm lengths as possible.

Work out how many 35 cm lengths of string Josh cuts.

.....  
**(Total for question 11 is 2 marks)**

**12** A string is 360 cm long.

Ben cuts four 12 cm lengths off the string.  
He then cuts the rest into as many 15 cm lengths as possible.

What length of string is left after Ben cuts as many 15 cm lengths as possible?

.....  
**(Total for question 12 is 2 marks)**

**13** A bartender's hourly wage on weekdays is £10.80.  
Hourly wage on weekends is £13.  
She gets overtime payments of £15 per hour throughout the week.  
She works for 24 hours during weekdays, 12 hours during the weekend and 6 overtime hours.  
  
How much does she earn during the week?

.....  
**(Total for question 13 is 3 marks)**

**14** A housekeeper's hourly wage on weekdays is £9.8.  
Hourly wage on weekends is £14.  
He gets overtime payments of £16 per hour throughout the week.  
He works for 36 hours during weekdays, 8 hours during the weekend and 4 overtime hours.  
  
How much does he earn during the week?

.....  
**(Total for question 14 is 3 marks)**



**15** Ali wants to buy chocolate milk for every student in his year.

There are 98 students in his year.

A pack of 6 chocolate milk boxes costs £7.20

Work out how much Ali will have to pay for the chocolate milk.

.....  
**(Total for question 15 is 2 marks)**

**16** Minho wants to buy a cupcake for every guest in his birthday party.

There are 49 guests

A pack of 7 cupcakes costs £4.90

Work out how much Minho will have to pay for the cupcakes.

.....  
**(Total for question 16 is 2 marks)**

Leave  
blank

**17** Jen and Emma saved a total of £646.  
Emma saved £116 more than Jen.

How much did Emma save?

.....  
**(Total for question 17 is 3 marks)**

**18** Liam and Mike saved a total of £564.  
Mike saved £56 more than Liam.

How much did Liam save?

.....  
**(Total for question 18 is 3 marks)**

**19** Aleena has boiled a kettle.  
She has 2.5 litres of milk.

Aleena want to make as many cups of coffee as possible.  
For each cup of coffee she needs 150ml of milk.

How many cups of coffee an Aleena make?

.....  
**(Total for question 19 is 2 marks)**

**20** A shop sells detergent in 450g packs.

Noah wants to buy detergent.

He estimates that he does 3 washes a week, using 35g each wash.  
Noah wants to buy enough detergent for 21 weeks.

How many packs of detergent does Noah need to buy?

.....  
**(Total for question 20 is 3 marks)**