

8300

GCSE MATHEMATICS

Foundation tier – Questions by Topic

Number

Finding percentages of amounts with a calculator

v1.0

Name _____

Materials

For this paper you must have:

- Mathematical instruments
- You may use a calculator



Information

- The marks for questions are shown in brackets

Advice

- In all calculations, show clearly how you work out your answer

Q1.

Increase 200 by 17%

(Total 2 marks)

Q2.

Work out 258% of 6300

(Total 2 marks)

Q3.

Which statement is true?
Circle your answer.

- 10% of 50 = 50% of 20
- 10% of 10 = 20% of 20
- 10% of 20 = 20% of 10
- 10% of 40 = 25% of 100

(Total 1 mark)

Q4.

Work out 10% of 170

(Total 1 mark)

Q5.

(a) Work out 70% of £986.

(2)

(b) Circle the calculations that have the same answer as 57% of 372.

- A 58% of 371
- B 5.7% of 37.20
- C $\frac{57}{100} \times 372$
- D 0.57×0.372
- E 5.7% of 3720

(2)

(Total 4 marks)

Q6.

Work out the value of 10% of 50

(Total 1 mark)

Q7.

Increase 4200 by 38%

(Total 2 marks)

Q8.

Work out 169% of 7800

(Total 2 marks)

Q9.

Increase 5400 by 27%

(Total 2 marks)

Q10.

28 is increased by 25%

40 is decreased by 15%

Which answer is bigger?

Show how you decide.

(Total 4 marks)

Q11.

Andrew is paid £850 a month.

Each month he

spends 60% of his pay

saves the rest.

How many months will it take Andrew to save £1700?

(Total 4 marks)

Q12.

Sid and Nancy each get the same pocket money.

Sid spends half of his.

He has £2.50 left.

Nancy spends 30% of hers.

How much does Nancy have left?

(Total 4 marks)

Q13.

Carly's total annual pay = salary + bonus

	Salary	Bonus
Last year	£26 000	£4000
This year	6% increase	9% decrease

Work out the percentage change in her total annual pay.

State whether it is an increase or a decrease.

(Total 4 marks)

Q14.

Ellen works for a company that sells cars.

Her **monthly** pay is

- a salary of £1470
- 28% of the total **profit** the company makes from her sales
- a £250 bonus **if** she sells at least 15 cars.

The table shows information about the cars she sold last year.

Total cost to the company	Total income for the company	Number of months when she sold at least 15 cars
£464 500	£538 000	3

Was Ellen's total pay for the **year** more than £40 000?

You **must** show your working.

(Total 6 marks)

Q15.

A gas company estimates the amount a household will spend on gas next year.

Estimate = £2500 excluding VAT

VAT is added at 5%

The household wants to pay in 12 equal monthly instalments.

Is £220 per month enough to pay for this gas?

You **must** show your working.

(Total 4 marks)

Q16.

A family uses 300 units of gas.

Each unit of gas costs 19p without VAT.

VAT of 5% is added to the bill.

Work out the total gas bill.

(Total 4 marks)

Q17.

A gym has 275 members.

40% are bronze members.

28% are silver members.

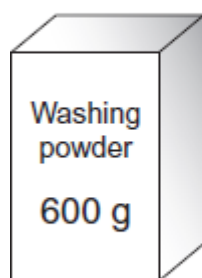
The rest are gold members.

Work out the number of gold members.

(Total 3 marks)

Q18.

Washing powder is sold in two sizes, 600 grams and 1500 grams.



£3.30



Was £9.60
Now 15% off

Which size is better value for money?

You **must** show your working.

(Total 6 marks)

Q19.

A train ticket costs £23.50

The price increases by 6%.

Felix has £100.

Can Felix buy four tickets at the new price?

(Total 4 marks)

Q20.

Jack sees the bicycle he wants to buy in two shops.

Bye-cycles



Price without VAT £130

VAT is 20%

Just Bykes



Normal price £195

Now $\frac{1}{4}$ off

VAT is included

In which shop is the bicycle cheaper?
You **must** show your working.

(Total 5 marks)

Q21.

Work out which distance is longer,
20% of 320 miles or $\frac{1}{2}$ of 130 miles.
You **must** show your working.

(Total 4 marks)

Q22.

In a test,
Section A has 80 marks
Section B has 120 marks.
Riya scores
55% in Section A
70% in Section B.
To pass, Riya needs to score 65% of the **total** marks.
Does she pass?
You **must** show your working.

(Total 4 marks)