

8300

GCSE MATHEMATICS

Foundation and Higher tier – Questions by Topic

Ratio, proportion and rates of change

Value for money

v1.0

Name _____

Materials

For this paper you must have:

- Mathematical instruments

Information

- The marks for questions are shown in brackets

Advice

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

For questions 1 to 5 you must **NOT** use a calculator.



Q1.

Here are two adverts for biscuits.

Super Snacks £3.40 per box OFFER 40% off

Cookie Club £3.09 per box OFFER $\frac{1}{3}$ off
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Which is cheaper, Super Snacks or Cookie Club?

You **must** show your working.

(Total 5 marks)

Q2.

Lisa wants to hire a car.

Company A No charge for mileage Normal price £66 each day Offer Now $\frac{1}{3}$ off

Company B No daily charge Normal price 75p each mile Offer Now 20% off
--

Which company is cheaper
to hire a car for 15 days
and
drive 1000 miles?

You **must** show your working.

(Total 5 marks)

Q3.

Kamil looks at two cars.

The normal price of Car A is £1550

The normal price of Car B is £1950

The cars are part of this offer.

Cars up to £1800 Sale price 20% off the normal price

Cars over £1800 Sale price $\frac{1}{3}$ off the normal price
--

Special Offer When the sale price is over £1250 Get an extra 5% off the sale price

After all reductions, which car is cheaper, Car A or Car B?

You **must** show your working.

(Total 5 marks)

Q4.

Here is a café menu.

Sandwich	£2.20
Slice of Pizza	£1.80
Drink	50p
Piece of Fruit	60p
Cake	80p

The café offers a Meal Deal.

Meal Deal
Get 80p off if you buy
1 sandwich
1 drink
and
1 piece of fruit.

How much does a meal deal cost?

You **must** show your working.

(Total 3 marks)

Q5.

Dipen and Nisha are planning their wedding reception.

£40 per guest
Total reduced by 5% with over 60 guests

Nisha says, "I want to invite 70 guests."

Dipen says, "If we invite one-fifth fewer guests, we will save more than £500"

Is Dipen correct?

You **must** show your working.

(Total 6 marks)

For the rest of the questions, you may use a calculator.



Q6.

- (a) A pack of 8 batteries costs £5.99
How much does each battery cost?

(2)

- (b) A pack of 6 batteries of the same type costs £3.99
Is this better value?

(2)

(Total 4 marks)

Q7.

Here are two bottles of the same perfume.



Normal price £40

20% off



£55

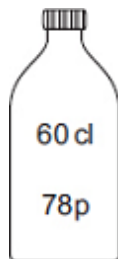
Which is the better value?

You **must** show your working.

(Total 6 marks)

Q8.

The diagram shows two bottles of the same drink.



Small



Large

You are given that 1 litre = 100 cl

Which bottle is better value for money?

You **must** show your working.

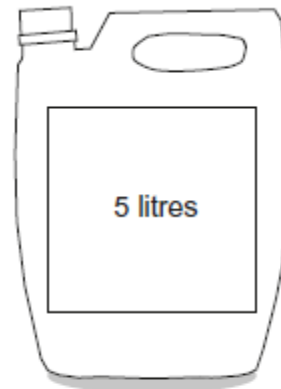
(Total 4 marks)

Q9.

Oil is sold in two sizes.



£8.75



was £49.80

now 15% off

Which size is better value for money?
You **must** show your working.

(Total 4 marks)

Q10.

Kitchen rolls are sold in a pack of 2 or a pack of 6



Pack of 2
£1.38



Pack of 6
£4.17

Which pack is the better value for money?
You **must** show your working.

(Total 3 marks)

Q11.

Boxes of chocolates each contain 25 chocolates.
One box costs £3.25
A shop has a special offer.

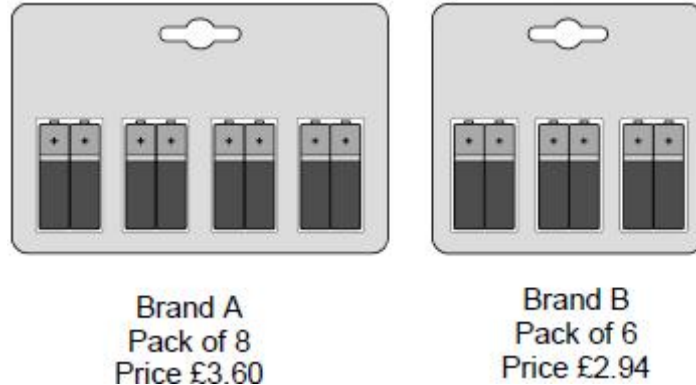
Two boxes for £5

How much cheaper **per chocolate** is the special offer?

(Total 3 marks)

Q12.

A shop sells two brands of battery.



One brand A battery powers a toy for 5 hours.

One brand B battery powers the same toy for $5\frac{1}{2}$ hours.

Which brand is better value?

You **must** show your working.

(Total 5 marks)

Questions 13 is **higher** tier only.

Q13.

A company makes boxes of cereal.

A box usually contains 450 grams of cereal.

Here are two options for a special offer.

Option A	Option B
20% more cereal	Usual amount of cereal
Price remains the same	15% off the price

Which option is the better value for the customer?

You **must** show your working.

(Total 3 marks)