

Surname	
Other Names	
Candidate's Signature	

GCSE 9 - 1 Questions

Best Buys

Calculator Allowed

INSTRUCTIONS TO CANDIDATES

Write your name in the space provided.

Write your answers in the spaces provided in this question paper.

Answer ALL questions.

Any working should be clearly shown in the spaces provided since marks may be awarded for partially correct solutions.

Total Marks :

1) You will be assessed on the quality of your written communication in this question.



The prices of doughnuts at two different shops are shown below.

Doh-boy Doughnuts
3 doughnuts for £2.80

Benny's Buns
4 doughnuts for £3.25

For a family tea-party, 12 doughnuts are needed.

- Which shop sells 12 doughnuts for the cheaper price?
- How much cheaper are they?

You must show all your working.

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2)

Ruma is taking some children on a trip.

She needs 34 cartons of juice.

Ruma can buy a single carton of juice for 45p.

She can buy a pack of 4 cartons for £1.52.

Ruma buys all the cartons she needs for the least possible amount of money.

How much did she spend?

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3)



Small bottle
300 ml for 66p



Medium bottle
400 ml for 92p



Large bottle
500 ml for £1.25

- (a) Roland is going to buy some orange juice for a party.
Which size bottle of orange juice offers the best value for money?
You must show your working.

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- (b) Galina needs to buy **exactly** 800 ml of orange juice.
Which is the best option for Galina?
You must show your working and consider all options.
You must give a reason for your choice.

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4)

You will be assessed on the quality of your written communication in this question.

A supermarket sells Jam Tarts in two sizes of box.

Regular size	Box of 6	£1.30
Jumbo size	Box of 15	£3

The supermarket has a special offer.

Buy any box
&
get a 2nd box of the same size
or of a smaller size for $\frac{1}{2}$ price!

Mrs Jones needs 70 Jam Tarts for the local church coffee morning.

Explain clearly, which is the cheapest way for her to buy the Jam Tarts and how much would they cost.

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5)

You will be assessed on the quality of your written communication in this question.

Arwyn needs four new tyres fitted on his car and would also like a new spare tyre. He sees two deals advertised at the garage.

"Economy Tyres"
£64 each

No matter how many
tyres fitted,
total fitting charge
£20

"Top Class Tyres"
Made to last longer!
 £95 each

10% discount if you buy 4 or more tyres

Free fitting

Arwyn has exactly enough money to buy four 'Top Class Tyres' and to have them fitted. Does he have enough money to buy, and have fitted, four 'Economy Tyres' with a fifth tyre as a spare?

You must show all your working.

[7]

[illegible]

6)

A supermarket sells 500 g pots of natural yogurt for £1.50 each.

During the first week of April, the supermarket has a special offer on this yogurt.



Buy 1 pot and
get a 2nd pot
for half price!

Two weeks later, the price of the same 500 g pot of natural yogurt is still the same but the supermarket changes the offer to:

Buy 2 pots and
get a 3rd pot free!

Keenan always buys six 500 g pots of this natural yogurt for his restaurant.

Which would have been the better offer?

You must show all your working.

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7)

You will be assessed on the quality of your written communication in this question.

Nadine is planning a party and needs to buy balloons.
Two different companies offer the same type of balloon for sale.

<p>PARTY PLAN</p> <p>Balloons 25p each</p> <p>Buy 8 and get 2 EXTRA free</p>

<p>BRIGHT BALLOONS</p> <p>Packs of 24 balloons</p> <p>Only £4.95 a pack</p>

Nadine needs to buy 120 balloons.

Which company offers the cheaper price for 120 balloons and by how much?
You must show all your working.

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8)

Jim grows potatoes in his garden.

He grows the potatoes by planting seed potatoes during the Spring.

Jim sees an advert in the local gardening magazine.



1 kg of seed potatoes costs £1.99
1 kg of seed potatoes will produce 12 kg of potatoes to eat

Jim decides to buy 15 kg of these seed potatoes.

- (a) How much will Jim pay for these seed potatoes? [2]

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- (b) (i) How many kilograms of potatoes are the seed potatoes that Jim buys likely to produce? [2]

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(ii)

Supermarket offer!
2.5 kg bag of potatoes for £2

Jim uses all of the potatoes he has grown.
How much is he likely to save by growing his own potatoes rather than buying the same amount of potatoes at the supermarket? [5]

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9)

You will be assessed on the quality of your written communication in this question.

Liz wants a new smartphone.
She compares two offers.

Offer 1:

Her current mobile service provider has the following deal for the smartphone and contract that she wants.



No upfront cost

£39 a month

2000 mins 5000 texts 2 GB

24 months contract

Offer 2:

Buy the handset from the Internet for £539 and have a SIM card only deal from your mobile service provider

Liz needs to have at least 2000 minutes and 5000 texts with only 2 GB of data allowance.

She finds out the following information on SIM card deals:

Monthly payment ▼	Mins ▼	Texts ▼	Data ▼
£10/month	1000	3000	500MB
£12.50/month	1500	5000	2GB
£12.50/month	2000	3000	2GB
£15/month	3000	5000	2GB
£20/month	3000	5000	3GB

Compare the costs of the two offers, over a 24 month period, and advise Liz which option she should choose.
You must show all your working. [8]

[8]

[illegible]

(b) Lobetus sells 2 brands of tyre, *Fudget* and *Gripwell*.

Brand of tyre	Cost per tyre 	Expected lifetime of the tyre, in miles
<i>Fudget</i>	£82	20 000
<i>Gripwell</i>	£140	30 000

Gripwell tyres are currently on special offer.

20% off *Gripwell* when buying 4 tyres



Nerys needs to buy 4 new tyres.

Which brand of tyre would you recommend that Nerys buys?

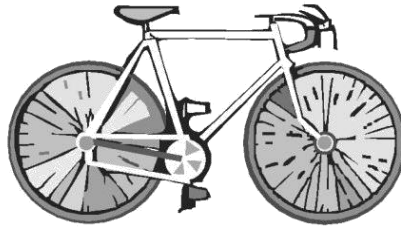
You must give a reason for your choice by considering both the cost and the lifetime of the 4 tyres.

You must show all your working.

[8]

[illegible]

12) Daniel wants to buy a new bicycle. It is priced at £480.



Daniel can either

- pay £480 immediately, or
- pay a 15% deposit, followed by 24 monthly payments of £22.

(a) Calculate the total amount Daniel would pay using the deposit and monthly payments method. [3]

You must show all your working.

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(b) Find the percentage increase in the cost of the bicycle when Daniel pays using the deposit and monthly payments method. [3]

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- (c) Graham gets 3 quotes from different companies for the cost of making the sign for his garage.
Each company charges £95 but offers different discounts.

The discounts are given below for each company.

Simon's Signs

Get
12% discount
off of all signs

Signs R Us

Discount
 $\frac{1}{10}$ off all prices

Signs & Symbols

We offer 15 pence off
every £1 spent

- (i) Calculate the discount that each company gives.
Write your answers in the table below.

Show all your working.

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	Simon's Signs	Signs R Us	Signs & Symbols
Actual discount	£	£	£

- (ii) Based on these quotes, which company should Graham choose to make his sign and why? [1]

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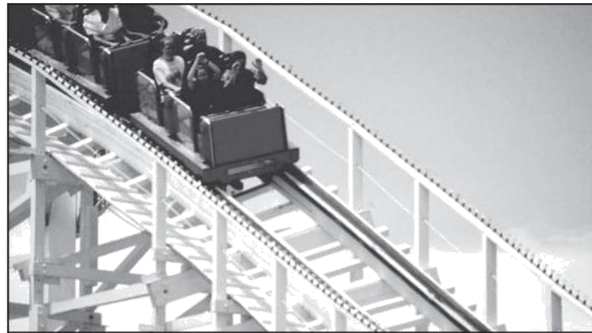
13)

You will be assessed on the quality of your written communication in this question.

Mr and Mrs Morris and their children, Nia and Bryn, went to Addington Theme Park for a day out.

Mr and Mrs Morris planned to go on 6 rides each.

Nia and Bryn planned to go on 8 rides each.



	Adult price	Child price
One-day ticket (includes all rides)	£21.50	£17.50
Individual ride ticket (per person per ride)	£2.50	£2.50

Mr and Mrs Morris bought tickets for themselves and for their children.

They spent as little money as possible.

How much money did it cost them altogether?

You must show all your working clearly.

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14)

You will be assessed on the quality of your written communication in this question.



Entry to Caerlech Castle

Adult £4.95

Child £4.60

Family ticket £14.50

(A family ticket provides entry for 2 adults and all children under 16 in the family)

Mr and Mrs Jones and their three children visit Caerlech Castle.
The children are all under 16 years of age.

How much cheaper is it for the Jones family to buy a family ticket compared with buying individual tickets?

You must show all your working.

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16)

Jacqui is planning a birthday party for her 8 year old daughter, Elian.

The party will be for 30 children, including Elian.
She decides that the party will be for 2 hours.

She finds out the following information about 3 party ideas.



Parties at Toots

£8 per head
Includes drinks, sausage and chips,
sweets, ice skating and build a bear!

30 children or more, get $\frac{1}{10}$ off

2-Hour Pool Party

£140 for the session
Bring your own food
Room available free
of charge

Bouncy Castle at the Hall

Bouncy Castle hire: £65
Community Hall Charge: £25 per hour
Bring your own food

For the places that do not provide food, Jacqui finds out that she can buy sausage, chips and a small drink for £1.50 per child.

- (a) Find the total cost of each party idea.
Show all your working.

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(b) What is the best option for Jacqui?
Give a reason for your answer.

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17)
(a)

Railcard for 16 to 25 year olds
£30 for a year
Get $\frac{1}{3}$ off all your rail travel

Nerys and Eleri are sisters.
Nerys is 22 years old and Eleri is 27 years old.

The two sisters live in Holyhead.
Their aunt lives in Milford Haven.
They travel by train to visit their aunt 3 times a year.

Nerys buys a 16-25 Railcard to use for these journeys.
They buy single rail tickets for each journey.
The cost of a **single** rail ticket from Holyhead to Milford Haven is £84.50.
The journey home from Milford Haven also costs £84.50 per ticket.

In a year, how much less does Nerys pay than Eleri for the journeys to Milford Haven and back?
You must show all your working. [5]

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- (b) Cristiano is 22 years old.
He sometimes travels from Rhyl to Llandudno Junction by train.
The cost of a single rail ticket from Rhyl to Llandudno Junction is £7.80.

Nerys advises Cristiano to buy a Railcard.
Cristiano says,

It is not worth paying £30 for the Railcard.

How many times in a year would Cristiano have to travel to make it worthwhile for him to buy a Railcard? [3]

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18)

Adam was buying items for his new puppy from a pet store.

(a) Complete his bill.

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Items	Cost
2 bags of "Woof" dry dog food @ £12.87 per bag	£
12 tins of "Waggy-tail" dog meat @ 60p each	£
1 dog bowl	£
Total	£ 41.69

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(b)



How much more money would Adam need to spend in order to get a free bag of "Doggy Treats"? [1]

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(c) Adam knew that “Woof” dry dog food cost £12.87 for a bag weighing 3 kg.

(i) What was the cost per kilogram of “Woof” dry dog food? [1]

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(ii) The same type of dry dog food could be purchased in 10 kg economy bags costing £36.50 each.
How much cheaper, per kilogram, was an economy bag than a 3 kg bag? [2]

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