



**Bishops
Online
Tutoring**



Education Consultancy

Edexcel GCSE Mathematics

BEST BUYS

Materials Required:

- Pen
- HB Pencil
- Ruler (in centimetres and millimetres)
- Protractor
- Compass

Instructions:

- Use a black ink pen to answer all questions
- Fill your name in the section below
- Answer the questions in the spaces provided
- Show your working out for all answers

Information:

- The marks allocated for each question are displayed within brackets – utilise this information to gauge the appropriate amount of time to dedicate to each question
- Questions marked with an asterisk (*) will assess your written communication; be careful of spelling, punctuation and grammar with these questions

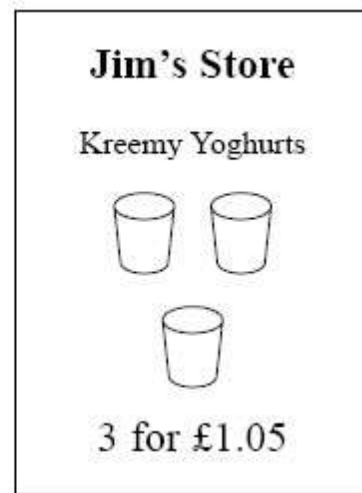
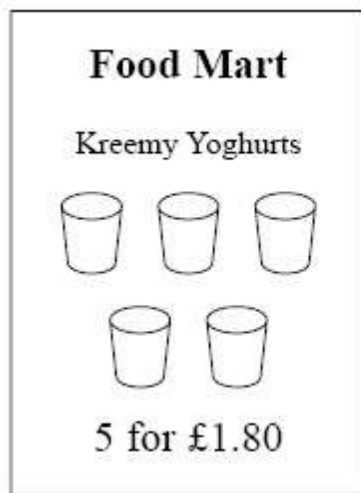
Advice:

- Carefully read the question before attempting to answer it
- Be vary of time and try to answer every question
- If you have enough time in the end, go back and check your answers. A good way to check your answers is to retry the question with the hope of getting the same answer as before without looking at your working out from before

NO CALCULATOR ALLOWED

NAME:

1. Two shops, Food Mart and Jim's Store, both sell Kreemy Yoghurts.



At which shop are Kreemy Yoghurts the better value for money?
You must show all your working.

LCM between 5 & 3 = 15

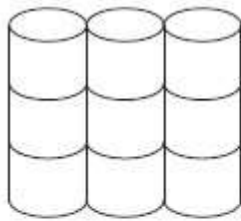
Food Mart	Jim's Store
5 for £1.80	3 for £1.05
$£1.80 \times 3 = £5.40$	$£1.05 \times 5 = £5.25$

Jim's store is better value for money

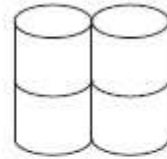
Jim's Store

(3 marks)

2.



Pack of 9
toilet rolls
£4.23



Pack of 4
toilet rolls
£1.96

A pack of 9 toilet rolls costs £4.23

A pack of 4 toilet rolls costs £1.96

Which pack gives the better value for money?

You must show all your working.

LCM between 9 & 4 = 36

$£4.23 \times 4 = £16.92$ (9 pack)

$£1.96 \times 9 = £17.64$ (4 pack)

The 9 pack is better value for money

The 9 pack

(3 marks)

- *3. T-shirts normally cost £12 each.
Two shops have a special offer on these T-shirts.

T-Shirts-R-Us



Special offer
Pay for two T-shirts and get one free.
Pay for five T-shirts and get three free

Budget Shirt Company



Special offer
1/3 off normal price

Stephen wants to buy 30 T-shirts.

$$12 \times 30 = 360$$

Work out at which shop, Stephen will get the better deal.
You must show clearly how you got your answer.

T-shirts-R-Us	Budget Shirt Company
5 → 3	$360 \times \frac{1}{3} = 120$
5 → 3	
5 → 3	$360 - 120 = \text{£}240$
2 → 1	
2 → 1	
He buys 19	
$19 \times 12 = \text{£}228$	

T-Shirts - R - Us
is cheaper by £12
(4 marks)

*4.

Potatoes cost £9 for a 12.5 kg bag at a farm shop.

The same type of potatoes cost £1.83 for a 2.5 kg bag at a supermarket.

Where are the potatoes the better value, at the farm shop or at the supermarket?

You must show your working.

$$12.5 \text{ kg} \div 2.5 \text{ kg} = 5$$

$$£1.83 \times 5 = £9.15 \text{ (supermarket)}$$

If we buy 12.5kg of potatoes from both the farm shop and the supermarket, they'll be cheaper by 15p at the farm shop

Farm shop

(4 marks)

*5. Radox Handwash cost is on offer at Boots and Superdrug.

Boots 500ml bottles on offer at 3 for 2

Superdrug 300ml bottles on offer at buy one get one free

One 500ml bottle of handwash at Boots costs £2.50

One 300ml bottle of handwash at Superdrug costs £1.75

Where is the handwash better value, at Boots or Superdrug?

You must show your working.

Superdrug

$$TC = £1.75$$

$$TAH = 2 \times 300 \text{ ml} = 600 \text{ ml}$$

$$Cp/ml = \frac{£1.75}{600 \text{ ml}} = £0.0029 \text{ £/ml}$$

Superdrug

(4 marks)

The cost per millilitre is lower at Superdrug

TC = Total Cost, TAH = Total Amount of Handwash

More information and resources available at www.BishopsOnlineTutoring.com

For video tutorials check us out on YouTube, Instagram and TikTok @Bishops_Online_Tutoring

Cp/ml = Cost per millilitre

LCM between 1200 and 700 = 8400

✓ 1200g

- *6. Carrots cost £1 for a 1.2kg bag at Tesco.
The same type of carrots cost 77 pence for a 700g bag at ASDA.

$$1200 \times 7 = 8400$$

$$700 \times 12 = 8400$$

Where are the Carrots better value.
You must show your working.

$$\text{Tesco} = £1 \times 7 = £7 \text{ (for 8.4kg of carrots)}$$

$$\text{Asda} = £0.77 \times 12 = £9.24 \text{ (for 8.4kg of carrots)}$$

The carrots are better value for money at Tesco;
8.4kg are cheaper at Tesco by £2.24

Tesco

(4 marks)

- *7. Diet Coke is on offer at Morrisons and Sainsburys.

Morrisons: 2 litre bottles on offer 3 for £4.50

Sainsburys: 24 cans x 330ml on offer for £8.85

TV = Total Volume

TC = Total Cost

Cp/l = Cost per litre

Morrisons

$$\text{TV for 3 bottles} = 3 \times 2 \text{ litres} = 6 \text{ litres}$$

$$\text{TC} = £4.50, \quad \text{Cp/l} = \frac{£4.50}{6 \text{ litres}} = £0.75 \text{ per litre}$$

Sainsburys

$$\text{TV for 24 cans} = 24 \times 330\text{ml} = 7920\text{ml}$$

$$\text{TC} = £8.85, \quad \text{Cp/l} = \frac{£8.85}{7.92 \text{ litres}} = £1.12 \text{ per litre}$$

Diet coke is cheaper at
Morrisons by 37p per litre

Morrisons

(4 marks)

8. Taha wants to buy an iPod.
The iPod that Taha wants is sold in two different shops.

Pod Direct
15% OFF usual price of £120

Music City
£84 plus VAT at 17½ %

Work out the difference in the cost of the iPod at the two shops..

Pod Direct

$$10\% \text{ of } £120 = £12$$

$$5\% \text{ of } £120 = £6$$

$$15\% \text{ of } £120 = £18$$

$$£120 - £18 = \underline{£102}$$

Music City

$$10\% \text{ of } £84 = £8.40$$

$$5\% \text{ of } £84 = £4.20$$

$$2.5\% \text{ of } £84 = £2.10$$

$$17.5\% \text{ of } £84 = £14.70$$

$$£84 + £14.70 = \underline{£98.70}$$

Music City is
cheaper than
Pod Direct by
£3.30

$$\begin{aligned}\text{Difference} &= 102 - 98.70 \\ &= \underline{£3.30}\end{aligned}$$

£ 3.30

(5 marks)

- *9. Railtickets and Cheaptrains are two websites selling train tickets.
Each of the websites adds a credit card charge and a booking fee to the ticket price.

Railtickets
Credit card charge: 2.25% of ticket price
Booking fee: 80 pence

Cheaptrains
Credit card charge: 1.5% of ticket price
Booking fee: £1.90

Nadia wants to buy a train ticket.
The ticket price is £60 on each website.
Nadia will pay by credit card.

Will it be cheaper for Nadia to buy the train ticket from Railtickets or from Cheaptrains?

Rail Tickets	Cheaptrains
Credit Card Charge $2.25\% \text{ of } 60 = £1.35$ Booking fee £0.80 $£60 + £1.35 + £0.80$ $= £62.15$	Credit Card Charge $1.5\% \text{ of } 60 = £0.90$ Booking fee £1.90 $£60 + £0.90 + £1.90$ $= £62.80$

The ticket will be cheaper
if bought through Rail Tickets
by £0.65

Rail Tickets

(4 marks)