

Exchange Rates & Best Buys

Question Paper

Course	Edexcel IGCSE Maths
Section	1. Numbers & the Number System
Topic	Exchange Rates & Best Buys
Difficulty	Hard

Time allowed: 50
Score: /37
Percentage: /100

Question 1

Two shops, Mega Bathrooms and Bathroom Mart, each have a sale.

Mega Bathrooms
Sale
60% off normal price
then
15% off

Bathroom Mart
Sale
 $\frac{2}{3}$ off normal price

Sally wants to buy some bathroom units.

The units have a normal price of £1500.

Sally wants to buy the units as cheaply as possible.

Which shop should she buy the units from?

You must show all your working.

[4 marks]

Question 2

Henry is thinking of having a water meter.

These are the two ways he can pay for the water he uses.

<p style="text-align: center;">Water Meter</p> <p style="text-align: center;">A charge of £28.20 per year</p> <p style="text-align: center;">plus</p> <p style="text-align: center;">91.22p for every cubic metre of water used</p> <p style="text-align: center;">1 cubic metre = 1000 litres</p>
<p style="text-align: center;">No Water Meter</p> <p style="text-align: center;">A charge of £107 per year</p>

Henry uses an average of 180 litres of water each day.

Use this information to determine whether or not Henry should have a water meter.

[5 marks]

Question 3

In the UK, petrol cost £1.24 per litre.

In the USA, petrol cost 3.15 dollars per US gallon.

1 US gallon = 3.79 litres

£1 = 1.47 dollars

Was petrol cheaper in the UK or in the USA?

[4 marks]

Question 4

Identical pairs of boots are sold in London, in Geneva and in Paris.

These boots have a price of

£115 in London

189 Swiss francs in Geneva

174 euros in Paris

The exchange rates are

£1 = 1.39 Swiss francs

£1 = 1.27 euros

Are the boots the best value for money in London or in Geneva or in Paris?

You must show how you get your answer.

[3 marks]

Question 5

In London, 1 litre of petrol costs 108.9p

In New York, 1 US gallon of petrol costs \$2.83

1 US gallon = 3.785 litres

£1 = \$1.46

In which city is petrol better value for money, London or New York?

You must show your working.

[3 marks]

Question 6

Three companies sell the same type of furniture.

The price of the furniture from Pooles of London is £1480

The price of the furniture from Jardins of Paris is €1980

The price of the furniture from Outways of New York is \$2250

The exchange rates are

£1 = €1.34

£1 = \$1.52

Which company sells this furniture at the lowest price?

You must show how you get your answer.

[3 marks]

Question 7

Tom is going to buy 25 plants to make a hedge.
Here is information about the cost of buying the plants.

<p>Kirsty's Plants</p> <p>£2.39 each</p>

<p>Hedge World</p> <p>Pack of 25</p> <p>£52.50 plus VAT at 20%</p>

Tom wants to buy the 25 plants as cheaply as possible.

Should Tom buy the plants from Kirsty's Plants or from Hedge World?
You must show all your working.

[5 marks]

Question 8

Astrid wants to buy some oil.

She can buy the oil from either Dane Oil or Arctic Oil.

Here is information about the price that each company will charge Astrid.

Dane Oil	Arctic Oil
(4.2×10^5) litres for 2 500 000 Krone	(8.6×10^5) litres for 770 000 Dollars

Astrid wants to get the better value for money for the oil.

$$1 \text{ Dollar} = 6.57 \text{ Krone}$$

From which company should she buy her oil, Dane Oil or Arctic Oil?

You must show your working.

[4 marks]

Question 9

Bottles of drink are for sale at three shops.

The normal price of a bottle is the same at each shop.

<p>Shop A Buy 1 bottle Get 2 more bottles at half price</p>	<p>Shop B Buy 2 bottles Get 3 more bottles at half price</p>
<p>Shop C 30% off a bottle</p>	

What is the cheapest way to buy **exactly** 8 bottles?

You can buy from more than one shop.

You **must** show your working.

[3 marks]

Question 10

On holiday Maria paid 2.25 euros for a newspaper when the exchange rate was \$1 = 0.9416 euros.

At home Maria paid \$1.13 for the newspaper.

Calculate the difference in price.

Give your answer in dollars, correct to the nearest cent.

\$

[3 marks]

