

GCSE QUESTIONS WITH CLUES

Q1. NON-CALCULATOR

Rehan is on holiday in the USA.

He has \$200 to spend on clothes.

Rehan buys

1 pair of trainers costing \$60

3 T-shirts costing \$25 each.

He also wants to buy a jacket costing \$80

- (a) Has Rehan got enough money to buy the jacket?
You must show how you get your answer.

$$\text{Trainers : } 1 \times 60 =$$

$$\text{T-shirts : } 3 \times 25 =$$

$$\text{Jacket : } 1 \times 80 = \underline{\quad\quad} +$$

(3)

The trainers cost \$60

The exchange rate is $\$1 = \pounds 0.749$

$$\$1 = \pounds 0.75$$

Rehan says,

"The trainers cost less than £40"

Rehan is wrong.

- (b) Using a suitable approximation, show working to explain why.

$$\begin{array}{r} 75 \\ \times 60 \\ \hline \end{array}$$

$$\begin{array}{ccc} \times 60 \downarrow & \$1 = \pounds 0.75 & \downarrow \times 60 \\ & \$60 = & \end{array}$$

(2)

(Total for question = 5 marks)

Q2. CALCULATOR ALLOWED

Liz goes on holiday to South Africa.

Liz wants to change £850 into South African rand.
She wants to get as many 200 rand notes as possible.

The exchange rate is £1 = 18.53 rand.

Work out the greatest number of 200 rand notes that Liz can get for £850

$$\begin{array}{l} \times 850 \downarrow \\ \text{£} 1 = \text{R} 18.53 \\ \text{£} 850 = \end{array} \quad \begin{array}{l} \\ \\ \end{array} \quad \begin{array}{l} \\ \\ \end{array} \times 850$$

round down to
nearest integer

(Total for question = 3 marks)

Q3. CALCULATOR ALLOWED

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

$$\begin{array}{l} \text{£} 1 = \text{€} 1.34 \\ \text{£} 1 = \text{\$} 1.52 \end{array}$$

Which company sells this furniture at the lowest price? You must show how you get your answer.

Jardins

$$\begin{array}{l} \div 1.34 \\ \text{£} 1 = \text{€} 1.34 \\ \\ = \text{€} 1980 \\ \div 1.34 \end{array}$$

Outways

$$\begin{array}{l} \div 1.52 \\ \text{£} 1 = \text{\$} 1.52 \\ \\ = \text{\$} 2250 \\ \div 1.52 \end{array}$$

(Total for question is 3 marks)

Q4. CALCULATOR ALLOWED

Gina finds out the price of a CD box set in three different countries.

The price is

£98 in the UK

\$134.99 in the USA

€139.99 in Germany

The exchange rates are

£1 = \$1.43

€1 = £0.73

Gina wants to pay the cheapest price for the box set.

(a) From which country should Gina buy the box set? You must show how you get your answer.

USA
 $\div 1.43$
 \leftarrow
 $\pounds 1 = \$1.43$

 $= \$134.99$
 \leftarrow
 $\div 1.43$

Germany
 $\times 0.73$
 \rightarrow
 $\pounds 1 = \pounds 0.73$

 $\pounds 139.99 =$
 \rightarrow
 $\times 0.73$

(3)

Gina lives in the UK.

(b) Why might your answer to (a) not be the best country for Gina to buy the box set from?

(1)
 (Total for question = 4 marks)

Q5. CALCULATOR ALLOWED

Andy flies from the UK to Japan. His plane ticket costs £554

Andy then flies from Japan to Australia. His plane ticket costs 70 140 Japanese Yen.

The exchange rate is £1 = 140 Japanese Yen.

Leila flies from the UK to Australia. Her plane ticket costs 1860 Australian dollars.

The exchange rate is 1 Australian dollar = £0.62

Who pays more to fly from the UK to Australia, Andy or Leila? You must show clearly how you get your answer.

Andy
 $\div 140$
 \leftarrow
 $\pounds 1 = \pounds 140$

 $= \pounds 70140$
 \leftarrow
 $\div 140$

Leila
 $\times 0.62$
 \rightarrow
 $\pounds 1 = \pounds 0.62$

 $\pounds 1680 =$
 \rightarrow
 $\times 0.62$

Total =
 cost

(Total for question = 4 marks)

Q6. CALCULATOR ALLOWED

Sophia pays £222 for a plane ticket. She also pays 100 euros airport tax.

The exchange rate is £1 = 1.38 euros.

What percentage of the total cost of the ticket and the airport tax does Sophia pay for the airport tax?
Give your answer correct to 1 decimal place.

Airport Tax

$$\begin{array}{l} \div 1.38 \\ \hline \pounds 1 = \text{€} 1.38 \end{array}$$

$$\begin{array}{l} = \text{€} 100 \\ \div 1.38 \end{array}$$

Total

Percentage

$$\frac{\text{tax}}{\text{total}} \times 100\%$$

(1 dp)

..... %

(Total for question = 3 marks)

Q7. CALCULATOR ALLOWED

Asif is going on holiday to Turkey. The exchange rate is £1 = 3.5601 lira. Asif changes £550 to lira.

(a) Work out how many lira he should get. Give your answer to the nearest lira.

$$\begin{array}{l} \times 3.5601 \\ \hline \pounds 1 = \text{₺} 3.5601 \end{array}$$

$$\begin{array}{l} \pounds 550 = \\ \times 3.5601 \end{array}$$

..... lira

(2)

Asif sees a pair of shoes in Turkey. The shoes cost 210 lira.

Asif does not have a calculator.

He uses £2 = 7 lira to work out the approximate cost of the shoes in pounds.

$$7 \div 2 = 3.5$$

(b) Use £2 = 7 lira to show that the approximate cost of the shoes is £60

$$\begin{array}{l} \div 3.5 \\ \hline \pounds 2 = \text{₺} 7 \end{array}$$

$$\begin{array}{l} = \text{₺} 210 \\ \div 3.5 \end{array}$$

(2)

(c) Is using £2 = 7 lira instead of using £1 = 3.5601 lira a sensible start to Asif's method to work out the cost of the shoes in pounds? You must give a reason for your answer.

.....
.....

(1)

(Total for question = 5 marks)