

Name: _____

GCSE (1 – 9)

Exchange Rates

Instructions

- Use **black** ink or ball-point pen.
- Answer all Questions.
- Answer the Questions in the spaces provided – *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**

Information

- The marks for each Question are shown in brackets – *use this as a guide as to how much time to spend on each Question.*

Advice

- Read each Question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every Question.
- Check your answers if you have time at the end

- 1 Beth goes on holiday to Spain.
The exchange rate is £1 = €1.13

She changes £350 into Euros (€).

- (a) Work out how many Euros she receives.

$$\begin{array}{r} \text{£} \quad \text{€} \\ 1 \quad 1.13 \\ 350 \times x \end{array}$$

$$\begin{aligned} x &= 350 \times 1.13 \\ &= 395.50 \end{aligned}$$

€.....395.50.....

When Beth returns from holiday she changes €120 back into pounds.
The exchange rate is now £1 = €1.16

- (b) Work out how many pounds (£) Beth receives.
Give your answer to the nearest penny.

$$\begin{array}{r} \text{£} \quad \text{€} \\ 1 \quad 1.16 \\ x \times 120 \end{array}$$

$$\begin{aligned} 1.16x &= 120 \\ x &= \frac{120}{1.16} = 103.45 \end{aligned}$$

£.....103.45.....

(Total for question 1 is 4 marks)

- 2 Ben went on holiday to Australia. He changed £350 into Australian dollars (\$).
The exchange rate was £1 = \$2.1

- (a) Work out how many Australian dollars Ben should have received.

$$\begin{array}{r} \text{£} \quad \text{Au\$} \\ 1 \quad 2.1 \\ 350 \times x \end{array}$$

$$\begin{aligned} x &= 350 \times 2.1 \\ &= 735 \end{aligned}$$

\$.....735.....

When Ben returned he changed \$100 back into pounds.
The new exchange rate was £1 = \$2.2

- (b) Work out how many pounds Ben should have received.
Give your answer to the nearest penny.

$$\begin{array}{r} \text{£} \quad \text{\$} \\ 1 \quad 2.2 \\ x \times 100 \end{array}$$

$$\begin{aligned} 2.2x &= 100 \\ x &= \frac{100}{2.2} = 45.45 \end{aligned}$$

£.....45.45.....

(Total for question 2 is 4 marks)

- 3 Nicole is on holiday in France.
She spends €14.50 in a cafe.

The exchange rate is £1 = €1.15

Calculate how much Nicole spends in pounds (£).

$$\begin{array}{r} \text{£} \quad \text{€} \\ 1 \quad 1.15 \\ \times \quad 14.50 \\ \hline \end{array}$$

$$1.15x = 14.50$$

$$x = \frac{14.50}{1.15} = 12.61$$

£.....12.61.....

(Total for question 3 is 2 marks)

- 4 Amy is on holiday in Turkey
She changes £200 to Turkish lira.

The exchange rate is £1 = 7.7 Turkish lira

Calculate how many Turkish lira Amy receives

$$\begin{array}{r} \text{£} \quad \text{TL} \\ 1 \quad 7.7 \\ \times \quad 200 \\ \hline \end{array}$$

$$\begin{aligned} x &= 200 \times 7.7 \\ &= 1540 \end{aligned}$$

£.....1540.....

(Total for question 4 is 2 marks)

- 5 Mario is on holiday in Japan

He stays in a hotel for 7 nights.
The hotel costs ¥10000 for each night.

$$7 \times 10000 = 70000$$

The exchange rate is £1 = ¥140

Calculate how much Mario spends on the hotel in pounds.

$$\begin{array}{r} \text{£} \quad \text{¥} \\ 1 \quad 140 \\ \times \quad 70000 \\ \hline \end{array}$$

$$140x = 70000$$

$$x = \frac{70000}{140} = 500$$

£.....500.....

(Total for question 5 is 2 marks)

- 6 Brian bought a hat in France. He paid €45.
The same hat in England costs £39.99.

The exchange rate is £1 = €1.12

Is the hat cheaper in France or in England?
You must show your working.

$$\begin{array}{r} \text{£} \quad \quad \text{€} \\ 1 \quad \quad \quad 1.12 \\ x \quad \quad \quad 45 \end{array}$$

$$45 = 1.12x$$

$$x = \frac{45}{1.12}$$

$$= \text{£}40.18 \quad (\text{The hat's price in France})$$

It is cheaper in England.

(Total for question 6 is 3 marks)

- 7 A pair of trainers cost 3400 rupees in India.
The same pair of trainers cost £68 in the UK.

The exchange rate is £1 = 92 rupees.

Work out the difference between the cost of the trainers in India and in the UK.
Give your answer in pounds (£).

$$\begin{array}{r} \text{£} \quad \quad \text{INR} \\ 1 \quad \quad \quad 92 \\ x \quad \quad \quad 3400 \end{array}$$

$$3400 = 92x$$

$$x = \frac{3400}{92} = \text{£}36.96 \quad (\text{In India})$$

$$68 - 36.96 = \text{£}31.04$$

£.....31.04.....

(Total for question 7 is 3 marks)

- 8 Carla is on holiday in Italy.
She spends €35 in a restaurant.

The exchange rate is €1 = £0.89

Calculate how much Carla spends in pounds (£).

$$\begin{array}{r} \text{€} \\ 1 \\ 35 \end{array} \begin{array}{r} \text{£} \\ 0.89 \\ x \end{array}$$

$$\begin{aligned} x &= 35 \times 0.89 \\ &= \text{£}31.15 \end{aligned}$$

£.....31.15.....

(Total for question 8 is 2 marks)

- 9 The exchange rate in London is £1 = \$1.31

The exchange rate in New York is \$1 = £0.79

Bernie wants to change some pounds into dollars.

In which of these cities would Bernie get the most dollars?
You must show your working.

NEW YORK:

$$\begin{array}{r} \$ \\ 1 \\ x \end{array} \begin{array}{r} \text{£} \\ 0.79 \\ 1 \end{array}$$

$$\begin{aligned} 1 &= 0.79x \\ x &= \frac{1}{0.79} \\ &= 1.27 \end{aligned}$$

In New York £1 = \$1.27

Bernie would get
the most dollars
in London.

(Total for question 9 is 3 marks)

10 George is going on a trip to Vietnam.

He wants to change £750 into Vietnamese dong.
George wants to get as many 200 000 dong notes as possible.

The exchange rate is £1 = 29 000 dong.
Work out the greatest number of 200 000 dong notes that George can get for £750

$$\begin{array}{r} \text{£} \quad \text{VD} \\ 1 \quad 29\,000 \\ 750 \times x \end{array}$$

$$\begin{aligned} x &= 29\,000 \times 750 \\ &= 21\,750\,000 \end{aligned}$$

$$\frac{21\,750\,000}{200\,000} = 108.75$$

.....
108

(Total for question 10 is 3 marks)

11 In Australia a car costs \$26 500
In Ireland the same car costs €17 500

The exchange rates are £1 = \$1.96 and £1 = €1.14

Work out the difference in price between the car in Australia and Ireland.
Give your answer in pounds (£).

$$\begin{array}{r} \text{£} \quad \text{AU\$} \\ 1 \quad 1.96 \\ x \times 26\,500 \end{array}$$

$$\begin{aligned} 1.96x &= 26\,500 \\ x &= \frac{26\,500}{1.96} \\ &= 13\,520.41 \end{aligned}$$

$$\begin{array}{r} \text{£} \quad \text{€} \\ 1 \quad 1.14 \\ x \times 17\,500 \end{array}$$

$$\begin{aligned} 1.14x &= 17\,500 \\ x &= \frac{17\,500}{1.14} \\ &= 15\,350.88 \end{aligned}$$

$$15\,350.88 - 13\,520.41 \quad \text{£} \dots 1\,830.47 \dots$$

(Total for question 11 is 4 marks)

- 12 In London potatoes cost £0.45 per lb.
In Dublin potatoes cost €1.48 per kilogram.

$$1 \text{ kg} = 2.2 \text{ lbs}$$

$$£1 = €1.15$$

In which city are potatoes better value for money, London or Dublin?
You must show your working.

DUBLIN €1.48 for 2.2 lbs

$$\begin{array}{r} \text{€} \quad \text{lbs} \\ 1.48 \quad 2.2 \\ \times \quad \times \quad 1 \end{array}$$

$$2.2x = 1.48$$

$$x = \frac{1.48}{2.2}$$

$$= 0.672$$

(€ per lb)

London is better value

$$\begin{array}{r} \text{£} \quad \text{€} \\ 1 \quad 1.15 \\ \times \quad \times \quad 0.672 \end{array}$$

$$1.15x = 0.672$$

$$x = \frac{0.672}{1.15}$$

$$= £0.58$$

£0.58 per lb in Dublin

(Total for question 12 is 3 marks)

- 13 The exchange rate in London is £1 = €1.15

The exchange rate in Berlin is €1 = £0.88

Angela wants to change some pounds into euros.

In which of these cities would Angela get the most euros?

You must show your working.

BERLIN

$$\begin{array}{r} \text{€} \quad \text{£} \\ 1 \quad 0.88 \\ \times \quad \times \quad 1 \end{array}$$

$$0.88x = 1$$

$$x = \frac{1}{0.88}$$

$$= 1.14$$

In Berlin £1 = €1.14

She would get the most euros in London.

(Total for question 13 is 3 marks)

14 Frank is travelling from the USA to Germany.

Frank wants to book flights which cost \$710 and a hotel which costs €45 per night for 12 nights.

The exchange rates are as follows:

$$£1 = €1.14$$

$$\$1 = €0.85$$

Frank can spend no more than £1000

Work out if Frank is able to book the flights and the hotel.

FLIGHTS

$$\begin{array}{r} \$ \quad \quad \quad \text{€} \\ \cancel{1} \quad \quad \quad 0.85 \\ 710 \quad \times \quad x \end{array}$$

$$\begin{aligned} x &= 710 \times 0.85 \\ &= €603.50 \end{aligned}$$

$$\begin{aligned} €45 \times 12 &= €540 \\ &\text{(HOTEL)} \end{aligned}$$

$$603.50 + 540 = 1143.50$$

$$\begin{array}{r} £ \quad \quad \quad \text{€} \\ 1 \quad \quad \quad 1.14 \\ x \quad \times \quad \quad 1143.50 \end{array}$$

$$\begin{aligned} 1.14x &= 1143.50 \\ x &= \frac{1143.50}{1.14} \end{aligned}$$

$$= \underline{\underline{£1003.07}}$$

No.

(Total for question 19 is 4 marks)