



- 1 The exchange rate is $\text{£}1 = \text{€}1.14$.
Nadia changes $\text{£}250$ into euros.
Work out how many euros she gets.

(2 marks)

Each pound is worth 1.14

$$250 \times 1.14 = 285$$

Nadia gets 285

€285

- 2 A watch costs \$234 in New York. The same watch costs $\text{£}189$ in London.
 $\text{£}1 = \$1.30$
How much cheaper is the watch in New York? Give your answer in pounds.

(2 marks)

$$\$234 \div 1.30 = \text{£}180$$

$$\text{£}189 - \text{£}180 = \text{£}9$$

£9 cheaper

- 3 On holiday in France, Callum sees a jacket priced at $\text{€}84$.
The exchange rate is $\text{£}1 = \text{€}1.20$.
Work out the cost of the jacket in pounds.

(3 marks)

The rate means each $\text{£}1$ costs $\text{€}1.20$. Dividing $\text{€}84$ by $\text{€}1.20$ per pound finds how many pounds are equivalent

To change euros into pounds, divide by the exchange rate

$$84 \div 1.20 = 70$$

The jacket costs $\text{£}70$. Check

$$70 \times 1.20 = 84$$

£70

- 4 Theo changes £320 into dollars.
The exchange rate is £1 = \$1.30.
He is given as many \$50 notes as possible, with the rest in smaller notes.
Work out the number of \$50 notes Theo is given.

(3 marks)

$$320 \times 1.30 = 416, \text{ so Theo gets } \$416$$

$$416 \div 50 = 8.32, \text{ so 8 whole } \$50 \text{ notes fit}$$

$8 \times \$50 = \$400$, leaving \$16 in smaller notes. Theo gets 8
fifty-dollar notes

8

- 5 A games console costs £399 in London.
The same console costs €448.50 in Dublin.
The exchange rate is £1 = €1.15.
In which city is the console cheaper, and by how much? Give your answer in pounds.

(3 marks)

Convert the Dublin price to pounds

$$448.50 \div 1.15 = £390$$

$$\text{London price} = £399$$

$$399 - 390 = £9$$

The console is cheaper in Dublin, by £9

Dublin, by £9

- 6 Mia wants to change £500 into euros.
- Bank A: £1 = €1.14, no fee
 - Bank B: £1 = €1.17, with a fee of £5 taken off the £500 first

Which bank gives Mia more euros, and how many more?

(3 marks)

Bank A

$$500 \times 1.14 = €570$$

Bank B

$$500 - 5 = £495$$

$$495 \times 1.17 = €579.15$$

$$579.15 - 570 = 9.15$$

Bank B, €9.15 more

7

In France, petrol costs €1.82 per litre. In the UK, petrol costs 152.9p per litre.
£1 = €1.15

In which country is petrol cheaper? Show your working.

(3 marks)

$$€1.82 \div 1.15 = £1.5826...$$

= 158.3p per litre

UK: 152.9p per litre

UK is cheaper

8

A conversion graph for pounds to dollars is a straight line through (0, 0). The top point on the graph is £50 = \$65.

a. Work out the exchange rate, in dollars for £1.

b. Use this rate to change £140 to dollars, even though the graph only goes up to £50.

c. Change \$247 to pounds.

(3 marks)

a)

$$65 \div 50 = 1.3$$

\$1.30 for £1

b)

$$140 \times 1.3 = 182$$

\$182

c)

$$247 \div 1.3 = 190$$

£190

9

Ana is offered two jobs.

A job in Manchester pays £13.50 per hour.

A job in Berlin pays €16.24 per hour.

The exchange rate is £1 = €1.16.

Which job pays more per hour? You must show your working.

(3 marks)

Convert the Berlin rate to pounds

$$16.24 \div 1.16 = £14.00 \text{ per hour}$$

Compare: £14.00 > £13.50

The Berlin job pays more, by 50p per hour

- 10 Before a trip to America, Prav changes £400 into dollars at an exchange rate of £1 = \$1.25.

In America he spends \$380.

When he gets home, he changes his remaining dollars back into pounds at an exchange rate of £1 = \$1.20.

Work out how many pounds Prav gets back.

(3 marks)

$$400 \times 1.25 = 500, \text{ so Prav takes } \$500$$

$$\text{Dollars left} = 500 - 380 = \$120$$

Changing back

$$120 \div 1.20 = £100$$

£100

- 11 Olive oil is sold in two shops.

- Spain: 750 ml for €6.30
- UK: 500 ml for £4.20

£1 = €1.20

Which shop sells the olive oil at the better value? You must show your working.

(4 marks)

$$\text{Spain: } €6.30 \div 1.20 = £5.25 = 525\text{p}$$

$$525 \div 750 = 0.70\text{p per ml}$$

$$\text{UK: } 420 \div 500 = 0.84\text{p per ml}$$

Spain is better value

- 12 Chocolate is sold in two shops.

- Switzerland: 0.25 kg for 4.50 francs
- UK: 400 g for £4.00

£1 = 1.10 francs

Which shop sells the chocolate at the better value? You must show your working.

(4 marks)

$$0.25 \text{ kg} = 250 \text{ g}$$

$$4.50 \div 1.10 = £4.09 = 409\text{p}$$

$$409 \div 250 = 1.64\text{p per g}$$

$$\text{UK: } 400 \div 400 = 1\text{p per g}$$

UK is better value

13

A phone costs £520 in a UK shop.

In a New York shop the same phone costs \$650 plus sales tax at 8%.

The exchange rate is £1 = \$1.35.

Show that the phone costs the same in both shops.

(3 marks)

$$\text{New York price including tax} = 650 \times 1.08 = \$702$$

Convert to pounds

$$702 \div 1.35 = £520$$

This equals the UK price of £520, so the phone costs the same in both shops

14

Mia is booking a holiday.

Her flights cost £186.

Her hotel costs €78 per night for 5 nights.

She also buys \$260 of spending money.

The exchange rates are £1 = €1.20 and £1 = \$1.30.

Work out the total cost of the holiday in pounds.

(4 marks)

$$\text{Hotel total} = 78 \times 5 = 390$$

$$\text{Hotel in pounds} = 390 \div 1.20 = £325$$

$$\text{Spending money in pounds} = 260 \div 1.30 = £200$$

$$\text{Total} = 186 + 325 + 200 = £711$$

£711

15

In the USA petrol costs \$3.60 per US gallon. 1 US gallon = 3.8 litres. £1 = \$1.30.

- Work out the cost of 1 litre of petrol in the USA, in pence. Give your answer to the nearest penny.
- In the UK petrol costs 145p per litre. How much cheaper is it to buy 40 litres in the USA? Use your answer to part (a).

(4 marks)

a)

$$\$3.60 \div 3.8 = \$0.94736... \text{ per litre}$$

$$0.94736... \div 1.30 = £0.72874...$$

73p

b)

$$\text{UK: } 40 \times 145 = 5800\text{p} = £58.00$$

$$\text{USA: } 40 \times 73 = 2920\text{p} = £29.20$$

$$58.00 - 29.20 = 28.80$$

£28.80