

# Solutions

## Edexcel GCSE Mathematics (Linear) – 1MA0

# EXCHANGE RATES

### Materials required for examination

Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser.  
Tracing paper may be used.

### Items included with question papers

Nil



### Instructions

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Use black ink or ball-point pen.

Fill in the boxes at the top of this page with your name, centre number and candidate number.

Answer all questions.

Answer the questions in the spaces provided – there may be more space than you need.

Calculators may be used.

### Information

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

Questions labelled with an **asterisk** (\*) are ones where the quality of your written communication will be assessed – you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.

### Advice

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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. Jamie goes on holiday to Florida.  
The exchange rate is £1 = 1.70 dollars.

He changes £900 into dollars.

- (a) How many dollars should he get?

$$900 \times 1.70$$

..... 1530 ..... dollars

(2)

After his holiday Jamie changes 160 dollars back into pounds.  
The exchange rate is still £1 = 1.70 dollars.

- (b) How much money should he get?  
Give your answer to the nearest penny.

$$\frac{160}{1.70}$$

£ ..... 94.12 .....

(2)

(4 marks)

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2. Tania went to Italy.  
She changed £325 into euros (€).

The exchange rate was £1 = €1.68

$$325 \times 1.68$$

- (a) Change £325 into euros (€).

€ ..... 546 .....

(2)

When she came home she changed €117 into pounds.

The new exchange rate was £1 = €1.50

$$\frac{117}{1.50}$$

- (b) Change €117 into pounds.

£ ..... 78 .....

(2)

(4 marks)

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3.

Menu	
Hot dog	\$5.10
Chicken salad	\$4.50
Hamburger	\$3.80
Pizza	\$4.00

$$\begin{array}{r}
 5.10 \\
 5.10 \\
 5.10 \\
 4.50 \\
 \hline
 \$ 19.80
 \end{array}$$

A British family are on holiday in San Francisco.

At a café they order 3 hot dogs and 1 chicken salad.

The exchange rate is £1 = \$1.44  
 Work out their **total** bill in pounds (£).

$$\begin{array}{r}
 19.80 \\
 \hline
 1.44
 \end{array}$$

£ 13.75

(4 marks)

4. A student bought a pair of sunglasses in the USA.  
 He paid \$35.50  
 In England, an identical pair of sunglasses costs £26.99  
 The exchange rate is £1 = \$1.42

In which country were the sunglasses cheaper, and by how much?  
 Show all your working.

In US  $\$ \frac{35.50}{1.42} = £25$       In England £26.99  
 Cheaper in US by £1.99

Or  $£26.99 \times 1.42 = \$38.33$   
 Cheaper in US by \$2.83

(4 marks)

5. Hugh went on holiday to Italy.

While on holiday, he went shopping.

He bought a belt and a hat.

The belt cost 25 euros.

The hat cost 14 euros.

$$25 + 14 = 39 \text{€}$$

The exchange rate was £1 = 1.56 euros.

$$\frac{39}{1.56} = \text{£}25$$

Work out the total cost of the belt and the hat.

Give the total cost in pounds.

£ ..... 25 .....

(4 marks)

6. Linda is going on holiday to the Czech Republic.

She needs to change some money into koruna.

She can only change her money into 100 koruna notes.

Linda only wants to change up to £200 into koruna.

She wants as many 100 koruna notes as possible.

$$\text{£}200 \times 25.82$$

The exchange rate is £1 = 25.82 koruna.

$$= 5164 \text{ koruna}$$

How many 100 koruna notes should she get?

She will get 51 notes of 100 koruna

$$\frac{5100}{25.82} = \text{£}197.52$$

so £2.48 change

£2.48

(6 marks)

7. Tim is travelling home from holiday by plane.  
He buys some food and drink on the plane.

Price List	
Cheese Roll	£3.50
Crisps	£1.20
Chocolate bar	£1.30
Coffee	£2.50
Tea	£2.00
Orange Juice	£2.20
Exchange rate £1 = 1.25 euros	

$$\begin{array}{r}
 3.50 \\
 3.50 \\
 2.50 \\
 \underline{2.20} \\
 \text{£ } 11.70
 \end{array}$$

$$\frac{10\text{€}}{1.25} = \text{£}8$$

Tim buys two cheese rolls, a coffee and an orange juice.

$$\text{£ } 11.70 - \text{£}8$$

He pays part of the cost with a 10 euro note.  
He pays the rest of the cost in pounds (£).

$$= \text{£}3.70 \text{ to pay in pounds}$$

How much does Tim pay in pounds?

£ 3.70

(4 marks)

8. Esther went to France.

She changed £300 into Euros (€).  
The exchange rate was £1 = €1.25

$$300 \times 1.25$$

(a) How many Euros did she get?

€ 375 .....

(2)

Esther went shopping in France.  
She bought

2 necklaces for €2.60 each  
1 hat for €6.40  
1 bag for €9.80

2.60

2.60

6.40

9.80

21.40 €

The exchange rate was £1 = €1.25

(b) Work out her **total** bill in pounds (£).

$$\frac{21.40}{1.25} = \pounds 17.12$$

£ 17.12 .....

(4)

(6 marks)

9. Rosie and Jim are going on holiday to the USA.

Jim changes £350 into dollars (\$).

The exchange rate is £1 = \$1.34

$$350 \times 1.34$$

(a) Work out how many dollars (\$) Jim gets.

$$\begin{array}{r} \$ 469 \\ \hline \end{array} \quad (2)$$

In the USA Rosie sees some jeans costing \$67

In London the same make of jeans costs £47.50

The exchange rate is still £1 = \$1.34



(b) Work out the difference between the cost of the jeans in the USA and in London.  
Give your answer in pounds (£).

$$\frac{\$67}{1.34} = \pounds 50 \text{ in USA}$$

$$\pounds 50 - \pounds 47.50 = \pounds 2.50$$

£2.50 cheaper in London

$$\begin{array}{r} \pounds 2.50 \\ \hline \end{array} \quad (3)$$

(5 marks)

10. The exchange rate in London is £1 = €1.14  
The exchange rate in Paris is €1 = £0.86

Elaine wants to change some pounds into euros.

In which of these cities would Elaine get the most euros?  
You must show all of your working.

$$\frac{\pounds 1.00}{0.86} = 1.16 \text{ € in Paris}$$

$$1.16 > 1.14$$

so gets more Euros in Paris

.....  
(4 marks)

11. Stephen imports cars from the USA. He sells them in the UK.

He has just bought a car in the USA costing \$24 000.  
It cost him £900 to import the car to the UK.

$$\frac{\$ 24000}{1.45} = \pounds 16551.72$$

The exchange rate is £1 = \$1.45

Stephen needs to make a profit of 20% on his total costs.

Work out the least amount that Stephen must sell the car for in the UK.  
Give your answer in pounds.

$$\begin{array}{r} \pounds 16551.72 \\ \quad 900.00 \quad + \\ \hline \pounds 17451.72 \end{array}$$

$$\pounds 17451.72 \times 1.2 = \pounds 20,942.06$$

£ .....

(4 marks)