



# EXAM PAPERS PRACTICE

GCSE Edexcel Math  
1MA1  
Exchange Rate

Answers

*"We will help you to  
achieve A Star "*



**Answer 1**

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.

The exchange rate is £1 = 25.82 koruna.

How many 100 koruna notes should she get?

THINK SCALE FACTORS!

£	koruna
1	25.82
200	?

$\times 25.82$

$$\begin{aligned} £200 &= 200 \times 25.82 \\ &= \underline{\underline{5164}} \text{ koruna} \end{aligned}$$

ROUND DOWN TO NEAREST 100

5100 koruna

WHICH IS 51 100 KORUNA NOTES



**Answer 2**

Ella has \$200 and £800

Her hotel bill is \$600

Ella pays the bill with the \$200 and some of the pounds.

(b) Use the conversion graph to work out how many pounds she has left.

$$\begin{aligned} \text{LEFT TO PAY} &= \$600 - \$200 = \$400 \\ &= \underline{\underline{£250}} \end{aligned}$$

$$\text{MONEY LEFT} = 800 - 250 = \underline{\underline{£550}}$$



**Answer 3**

Margaret is on holiday in France.

She buys an English newspaper.

The cost of the newspaper is 5 euros.

In England, the cost of the same newspaper is £2.50

The exchange rate is £1 = 1.16 euros.

Work out the difference between the cost of the newspaper in France and the cost of the newspaper in England.

EXCHANGE RATES  
- USE RATIOS

$$\begin{array}{l} \text{ENG : FRA} \\ \text{£1 : \$1.16} \\ \text{£2.50 : \$2.90} \end{array}$$

$\times 2.5$  (indicated by a blue arrow pointing from the first two lines to the third line)

$$\begin{aligned} \text{LA DIFFERENCE} &= 5 - 2.90 \\ &= \underline{\underline{\$2.10}} \end{aligned}$$



**Answer 4**

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.

$$\begin{array}{l} \text{£} : \text{LIRA} \\ 1 : 3.5601 \\ \times 550 \left\{ \begin{array}{l} 550 : ? \end{array} \right. \times 550 \end{array}$$

$$\begin{aligned} \text{LIRA} &= 3.5601 \times 550 \\ &= \underline{\underline{1958}} \text{ LIRA} \end{aligned}$$



**Answer 5**

- (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.

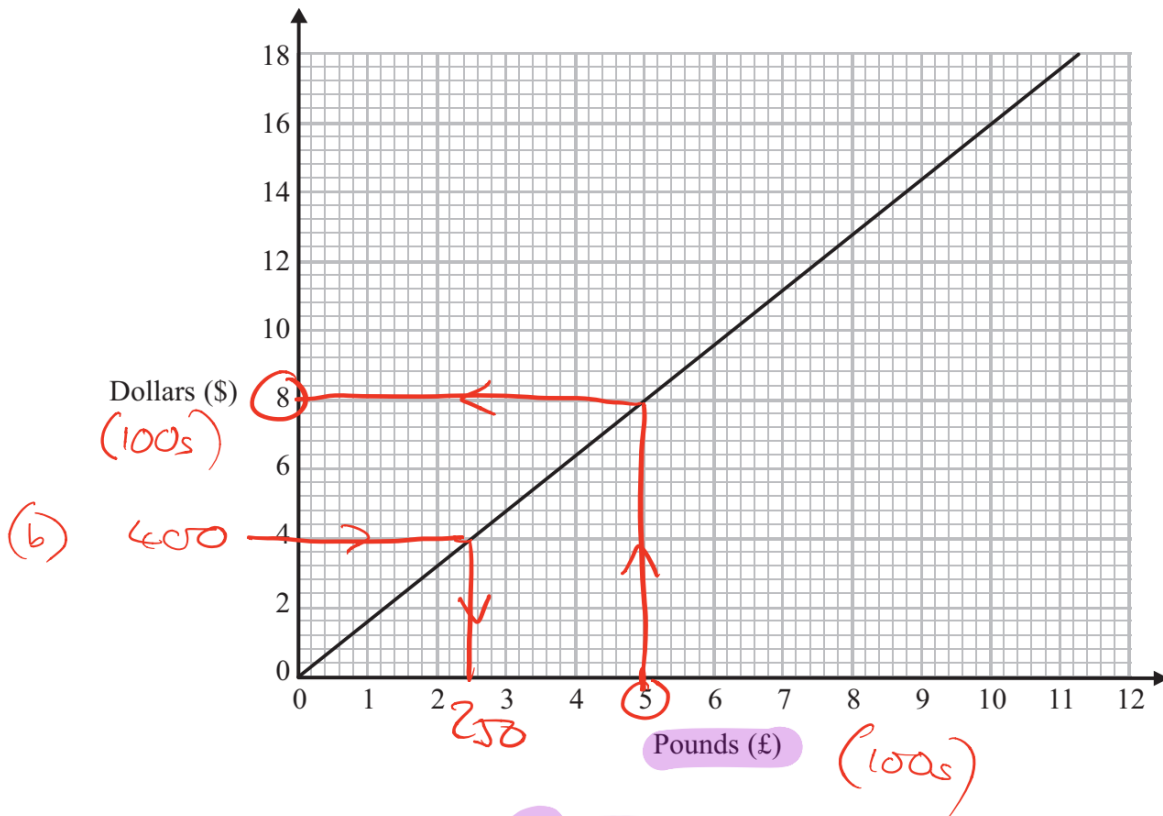
$$\begin{array}{l} \text{£} : \text{LIRA} \\ \times 2 \left\{ \begin{array}{l} 1 : 3.5601 \\ 2 : 7.1202 \end{array} \right\} \times 2 \end{array}$$

ACTUAL RATIO (2 : 7.1202) IS VERY CLOSE TO 2 : 7  
SO IT'S A GOOD APPROXIMATION AND EASY  
TO USE WITHOUT A CALCULATOR.



Answer 6

You can use this conversion graph to change between pounds (£) and dollars (\$).



(a) Use the conversion graph to change £5 to dollars.

\$ 8



**Answer 7**

Ben goes on holiday to Hong Kong.

In Hong Kong, Ben sees a camera costing HK\$3179.55

In London, an identical camera costs £285

The exchange rate is £1 = HK\$12.30

Ben buys the camera in Hong Kong.

How much cheaper is the camera in Hong Kong than in London?

**£ : HK\$**

$1 : 12.30$

$285 : ?$

$\times 285$  (on both sides)

London Cost =  $12.30 \times 285$

$= \underline{\underline{HK\$3505.50}}$

Difference =  $3505.50$

$- 3179.55$

$\underline{\underline{HK\$325.95}}$

**OR**

**£ : HK\$**

$1 : 12.30$

$? : 3179.55$

$\times \frac{3179.55}{12.30}$  (on both sides)

HK Cost =  $1 \times \frac{3179.55}{12.30}$

$= \underline{\underline{£258.50}}$

Difference =  $285.00$

$\underline{\underline{258.50}}$

$\underline{\underline{£26.50}}$





**Answer 8**

Colin is on holiday in France.  
He buys a wallet.  
The wallet costs 31 euros.

In London a wallet costs £23.50

The exchange rate is £1 = 1.34 euros.

USE RATIOS

Compare the cost of the wallet in France with the cost of the wallet in London.

$$\begin{array}{l} \text{£} : \text{€} \\ 1 : 1.34 \\ \times 23.50 \left( \begin{array}{l} 23.50 : ? \end{array} \right) \times 23.50 \end{array}$$

$$\begin{aligned} \text{LONDON WALLET COSTS } & 1.34 \times 23.5 \text{ EUROS} \\ & = \underline{\underline{€31.49}} \end{aligned}$$

THE WALLET IS SLIGHTLY MORE EXPENSIVE (€31.49) IN LONDON THAN IN FRANCE (€31)



**Answer 9**

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

Asif does not have a calculator.  
He uses  $\text{£}2 = 7$  lira to work out the approximate cost of the shoes in pounds.

(b) Use  $\text{£}2 = 7$  lira to show that the approximate cost of the shoes is  $\text{£}60$

$$\begin{array}{l} \text{£} : \text{LIRA} \\ \times 30 \left( \begin{array}{l} 2 : 7 \\ ? : 210 \end{array} \right) \times \frac{210}{7} = 30 \end{array}$$

$$\text{Approx Cost} = 2 \times 30 = \underline{\underline{\text{£}60}}$$



**Answer 10**

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?

In UK:  
£1.24 ↔ 1 Litre  
× 1.47 ↘  
\$1.82 ↔ 1 Litre  
× 3.79 ↘  
\$6.91 ↔ 1 US Gallon.

In US  
\$3.15 ↔ 1 US Gallon

IT IS CHEAPER IN THE USA.



**Answer 11**

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.

Convert London Price USG / \$

London: 1 LITRE COSTS 108.9p

$$\begin{array}{l} \times 3.785 \left\{ \begin{array}{l} 1 \text{ USG COSTS } 412.1805 \text{p} \\ = \pounds 4.12 \text{p} \\ = \underline{\underline{\$ 6.02}} \end{array} \right. \end{array}$$

$\left. \begin{array}{l} 108.9 \text{p} \\ 412.1805 \text{p} \end{array} \right\} \times 3.785$

$\left. \begin{array}{l} 412.1805 \text{p} \\ = \pounds 4.12 \text{p} \\ = \underline{\underline{\$ 6.02}} \end{array} \right\} \times 1.46$

SINCE \$2.83 < \$6.02

PETROL IS MUCH BETTER IN NY



**Answer 12**

Jalin lives in England.

He does a search on the internet and sees the same type of camera on sale in France and in America.

In France, the camera costs 126 euros.

In America, the camera costs \$165.24

Jalin finds out these exchange rates.

**Exchange rates**

1 euro = £0.89

£1 = \$1.62

How much cheaper is the camera in America than in France?

Give your answer in pounds (£).

In France:

$$126 \times 0.89 = 112.14$$

In USA:

$$165.24 = \text{price} \times 1.62$$

$$165.24 / 1.62 = 102$$

$$112.14 - 102 = 10.14$$

**Answer 13**

Eric travels from the UK to India every year.

In 2010, the exchange rate was £1 = 67.1 rupees.

In 2012, the exchange rate was £1 = 82.5 rupees.

In 2010 Eric changed £600 into rupees.

How many pounds (£) did Eric have to change to rupees in 2012 to get the same number of rupees as he did in 2010?

$$600 \times 67.1 = 40260$$

Eric had 40260 rupees in 2010

$$\text{New exchange rate in 2012} = 1:82.5$$

$$40260/82.5 = 488 \text{ pounds}$$

£ 488 .....



**Answer 14**

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

} USE RATIOS

Are the boots the best value for money in London or in Geneva or in Paris?  
You must show how you get your answer.

<u>GENEVA</u>			<u>PARIS</u>		
£	: SF		£	: €	
1	: 1.39		1	: 1.27	
$\frac{189}{1.39}$	: ?	$\times \frac{189}{1.39}$	$\frac{174}{1.27}$	: ?	$\times \frac{174}{1.27}$
COST = $1 \times \frac{189}{1.39}$			COST = $1 \times \frac{174}{1.27}$		
= <u>£135.97</u>			= <u>£137.01</u>		

BEST VALUE IS IN LONDON AS  
£115 < £135.97  
AND £115 < £137.01



**Answer 15**

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

$$£1 = €1.34$$

$$£1 = \$1.52$$

} USE RATIOS

Which company sells this furniture at the lowest price?

You must show how you get your answer.

CONVERT ALL INTO £

JARDINS OF PARIS

$$£ : €$$

$$\begin{array}{l} 1 : 1.34 \\ \frac{1980}{1.34} : ? \end{array} \quad \times \frac{1980}{1.34}$$

$$? = \underline{\underline{£1477.61}}$$

OUTWAYS OF NY

$$£ : \$$$

$$\begin{array}{l} 1 : 1.52 \\ \frac{2250}{1.52} : ? \end{array} \quad \times \frac{2250}{1.52}$$

$$? = \underline{\underline{£1480.26}}$$

$$\text{POOLES OF LONDON} = \underline{\underline{£1480}}$$

JARDINS OF PARIS SELLS AT LOWEST PRICE