

**Intermediate Tier Numeracy PPQs**

1. Catrin went on holiday to Brazil



- (a) She changed £850 into Brazilian Real (R\$) when the exchange rate was £1 = 5.44 R\$. How many Brazilian Real (R\$) did she receive? [2]

$$£850 \times 5.44 = 4624 \text{ R\$}$$

- (b) Whilst on holiday, she went on a tour which cost 500 R\$. What was the cost of the tour in pounds? [2]

$$500 \div 5.44 = £91.91$$

2. The currency in Brazil is known as the Brazilian Real BRL

		
Year	Pound (£)	Brazilian Real (BRL)
2010	1	2.86
2014	1	3.71

In 2010, Ava bought £3400 worth of Brazilian Real BRL.  
In 2014, Ava exchanged this money back into pounds.

Did Ava gain or lose money?  
State how much money Ava gained or lost, giving your answer correct to the nearest pound [5]

$$\text{in } 2010 \quad £3400 \times 2.86 = 9724 \text{ BRL}$$

$$\text{in } 2014 \quad 9724 \div 3.71 = £2621 \text{ to nearest £}$$

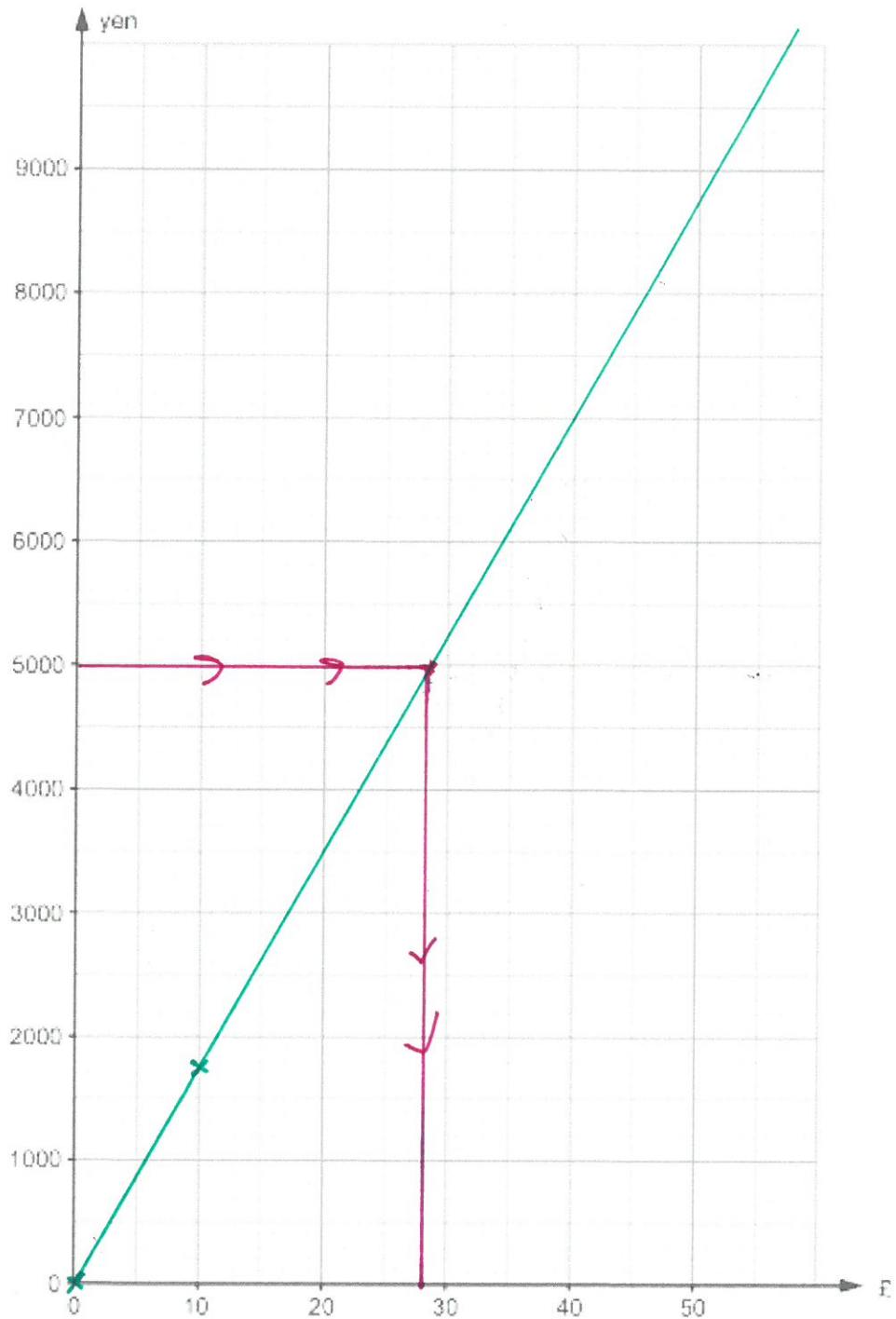
$$\text{So she loses } 3400 - 2621 = £779.$$

3.

Dylan is going on a trip to Japan.  
The exchange rate at the time of his trip is £1 = 175 yen.

- (a) Draw a conversion graph between £ and yen on the graph paper below.  
The graph should show the conversion from £0 to £50.

[3]



- (b) Use your graph, or otherwise, to convert 20 000 yen into pounds.  
Give your answer correct to the nearest pound.

[2]

$$5000 \text{ yen} = £28$$

$$\begin{array}{r} \times 4 \\ \hline \end{array}$$

$$20000 \text{ yen} = £112$$

4. Dewi is going on holiday to China.

He has found the following rates for exchanging pounds sterling (£) and Chinese yuan (CYN) at a local exchange bureau.

Buying Chinese yuan (CYN)	£1 buys 9.28 CYN
Selling Chinese yuan (CYN)	9.42 CYN buys £1

The exchange bureau has all the possible sterling coins and notes. Dewi knows that the exchange bureau only sells and buys CYN notes and that no coins are available or accepted.

The bureau has many of the following CYN notes



- (a) Dewi has £460 to buy Chinese yuan.

Calculate

- the maximum number of CYN Dewi can buy, and
- how much, to the nearest penny, this will cost him

You must show all your working.

[5]

$$£460 \times 9.28 = 4268.8 \text{ CYN}$$

he can buy 4268 CYN in notes

$$\text{This will cost } 4268 \div 9.28 = £459.91$$

- (b) It would cost Dewi £100 to buy 928 CYN.  
 Dewi states that he will lose money when he changes any CYN notes that he buys back into pounds.  
 How much would Dewi lose in changing 928 CYN back into pounds? [3]

exchange rate is now  $£1 = 9.42 \text{ CYN}$

$$928 \div 9.42 = \pounds 98.51$$

So he has lost  $100 - 98.51 = \pounds 1.49$

5. Jack has returned to the UK having been working in Europe.  
 He has 450 euros, which he wants to exchange into pounds.  
 The exchange rate he is offered at the bank for changing euros into pounds is  $£1 = 1.20$  euros.  
 His sister Gillian is about to go on holiday to France and intends to exchange £400 into euros.  
 The exchange rate she is offered at the bank for changing pounds into euros is  $£1 = 1.08$  euros.  
 Rather than going to the bank,
- Jack gives Gillian his 450 euros,
  - Gillian gives Jack her £400.

Show how both Jack and Gillian save money by doing this.

If Jack changes his € into £ he will get  
 $€ 450 \div 1.20 = \pounds 375$

If Gill changes her £ into € she will get

$$\pounds 400 \times 1.08 = € 432$$

So if they just swap their money, Jack gets  $400 - 375 = \pounds 25$  more

Gill gets  $€ 450 - 432 = € 18$  more