



**EXAM PAPERS PRACTICE**

# Currency

## Model Answers

## Question 1

Pam wins the student of the year award in New Zealand.

She sends three photographs of the award ceremony by post to her relatives.

- one of size 13cm by 23cm to her uncle in Australia
- one of size 15cm by 23cm to her sister in China
- one of size 23cm by 35cm to her mother in the UK

Maximum lengths	Australia	Rest of the world
13 cm by 23.5 cm	\$1.90	\$2.50
15.5 cm by 23.5 cm	\$2.40	\$2.90
23 cm by 32.5 cm	\$2.80	\$3.40

### Answer:

*The total cost of sending the photographs to her uncle in Australia and her sister in China is  $2.90 = \$4.80$ . The cost of sending the photograph to her mother in the UK is unknown.*

## Question 2

The table shows how the dollar to euro conversion rate changed during one day

Time	1000	1100	1200	1300	1400	1500	1600
\$1	€1.3311	€1.3362	€1.3207	€1.3199	€1.3200	€1.3352	€1.3401

Khalil changed \$500 into euros (€).

How many more euros did Khalil receive if he changed his money at the highest rate compared to the lowest rate?

### Answer:

*First, we need to find the highest and lowest conversion rates. The highest rate is €1.3401 at 1600 and the lowest rate is €1.3199 at 1300.*

Next, we calculate how many euros Khalil would receive if he changed his money at these rates. At the highest rate, he would receive  $500 * \text{€}1.3401 = \text{€}670.05$ . At the lowest rate, he would receive  $500 * \text{€}1.3199 = \text{€}659.95$ .

Finally, we subtract the amount he would receive at the lowest rate from the amount he would receive at the highest rate to find out how many more euros he would receive.  $\text{€}670.05 - \text{€}659.95 = \text{€}10.1$ . So, Khalil would receive  $\text{€}10.1$  more if he changed his money at the highest rate compared to the lowest rate.

### Question 3

For her holiday, Alyssa changed 2800 Malaysian Ringgits (MYR) to US dollars (\$) when the exchange rate was  $1 \text{ MYR} = \$0.325$ .

At the end of her holiday she had \$210 left.

(a) How many dollars did she spend?

#### Answer:

First, we need to calculate how many dollars Alyssa had at the beginning of her holiday. We do this by multiplying the amount of Malaysian Ringgits she had by the exchange rate.  $2800 \text{ MYR} * \$0.325/\text{MYR} = \$910$

Then, we subtract the amount of dollars she had left at the end of her holiday from the amount she had at the beginning to find out how much she spent.  $\$910 - \$210 = \$700$  So, Alyssa spent \$700 during her holiday.

(b) She changed the \$210 for 750 MYR.

What was the exchange rate in dollars for 1 MYR

#### Answer:

First, Alyssa changed 2800 MYR to US dollars at a rate of \$0.325 per MYR. So, she received  $2800 * 0.325 = \$910$ .

At the end of her holiday, she had \$210 left. She changed this back to MYR and received 750 MYR. So, the exchange rate in dollars for 1 MYR when she changed her money back was  $210 / 750 = \$0.28$ .

#### Question 4

Federico changed 400 euros (€) into New Zealand dollars (NZ\$) at a rate of €1 = NZ\$ 2.1 .  
He spent  $x$  New Zealand dollars and changed the rest back into euros at a rate of €1 = NZ\$  $d$ .  
Find an expression, in terms of  $x$  and  $d$ , for the number of euros Federico received

#### Answer:

*First, Federico changed 400 euros into New Zealand dollars at a rate of €1 = NZ\$ 2.1. So, he got  $400 * 2.1 = 840$  New Zealand dollars. Then, he spent  $x$  New Zealand dollars. So, he had  $840 - x$  New Zealand dollars left.*

*Finally, he changed the rest back into euros at a rate of €1 = NZ\$  $d$ . So, he got  $(840 - x) / d$  euros. Therefore, the number of euros Federico received is  $(840 - x) / d$ .*

#### Question 5

(a.) In 2007, a tourist changed 4000 Chinese Yuan into pounds (£) when the exchange rate was £1 = 15.2978 Chinese Yuan.  
Calculate the amount he received, giving your answer correct to 2 decimal places.

#### Answer:

*First, we need to find out how many pounds (£) you get for 1 Chinese Yuan. We do this by dividing 1 by the exchange rate. So,  $1/15.2978 = 0.0654$  pounds (£) for 1 Chinese Yuan.*

*Next, we multiply this amount by the total amount of Chinese Yuan the tourist is changing. So,  $0.0654 * 4000 = £261.60$ . Therefore, the tourist received £261.60.*

(b) In 2006, the exchange rate was £1 = 15.9128 Chinese Yuan.  
Calculate the percentage decrease in the number of Chinese 2006 to 2007.



**Answer:**

*£261.47 \* 15.9128 Chinese Yuan/£ = 4158.96 Chinese Yuan Now, we can calculate the percentage decrease from 2006 to 2007. (4158.96 Chinese Yuan - 4000 Chinese Yuan) / 4158.96 Chinese Yuan \* 100 = 3.82% (rounded to the nearest hundredth) So, there was a 3.82% decrease in the number of Chinese Yuan from 2006 to 2007.*

**Question 6**

a) In October the cost of a car in euros was €20 000.  
 The cost of this car in pounds was £14 020.  
 Calculate the exact value of the exchange rate in October

**Answer:**

0.0701

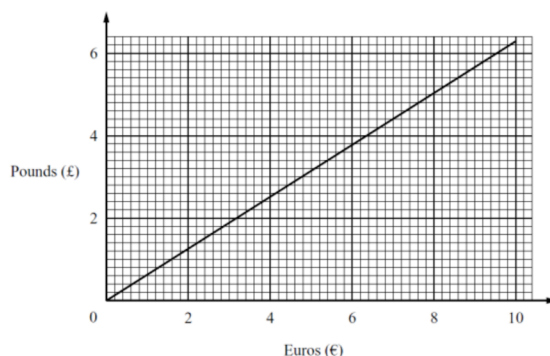
In November the car still cost €20 000 and the exchange rate was €1 = £0.6915.  
 Calculate the difference, in pounds, between the cost in October and November.

**Answer:**

(-) 190

**Question 7**

The graph below can be used to convert between euros (€) and pounds (£).



(a) Change £5 into euros

**Answer:**

7.85 to 8(.00...)

(b) Change e90 into pounds

**Answer:**

56.25 to 57.5(0)

### Question 8

Gregor changes \$700 into euros (€) when the rate is €1 = \$1.4131 .  
Calculate the amount he receives

**Answer:**

*First, we need to understand that Gregor is changing his dollars into euros. The rate is €1 = \$1.4131. This means for every \$1.4131, he gets €1. So, to find out how many euros he gets for \$700, we need to divide \$700 by the rate of \$1.4131.*

*Doing the calculation,  $\$700 \div \$1.4131 = \text{€}495.71$  approximately. So, Gregor receives approximately €495.71.*

### Question 9

Alberto changes 800 Argentine pesos (ARS) into dollars (\$) when the rate is \$1 = 3.8235 ARS.  
He spends \$150 and changes the remaining dollars back into pesos when the rate is \$1 = 3.8025 ARS.

Calculate the amount Alberto now has in pesos.

**Answer:**

*First, Alberto changes 800 ARS into dollars. To find out how many dollars he gets, we divide the amount in pesos by the exchange rate:  $800 \text{ ARS} / 3.8235 \text{ ARS}/\$ = \$209.32$  (rounded to the nearest cent) Then, Alberto spends \$150, so he has:  $\$209.32 - \$150 = \$59.32$  left.*



First, Alberto changes 800 ARS into dollars. To find out how many dollars he gets, we divide the amount in pesos by the exchange rate:  $800 \text{ ARS} / 3.8235 \text{ ARS}/\$ = \$209.32$  (rounded to the nearest cent) Then, Alberto spends \$150, so he has:  $\$209.32 - \$150 = \$59.32$  left.

### Question 10

A meal on a boat costs 6 euros (€) or 11.5 Brunei dollars (\$).

In which currency does the meal cost less, on a day when the exchange rate is €1 = \$1.9037?

Write down all the steps in your working.

### Answer:

First, we need to convert the cost of the meal in euros to Brunei dollars. We do this by multiplying the cost in euros by the exchange rate. So,  $6 \text{ euros} * \$1.9037/\text{€} = \$11.4222$ .

We see that \$11.4222 (converted from euros) is less than \$11.5. So, the meal costs less in euros.

### Question 11

Reina went on holiday to New Zealand.

(a) She travelled the 65 km from Tokyo to Narita Airport by taxi.

The taxi journey cost 300 yen (¥) per kilometre plus a fixed charge of ¥ 700.

Calculate the cost of the taxi journey.

### Answer:

To calculate the cost of the taxi journey, we need to add the fixed charge of ¥ 700 to the product of the distance travelled and the cost per kilometre. The distance travelled is 65 km and the cost per kilometre is ¥ 300. Therefore, the total cost of the taxi journey is:

$$700 + 65 * 300 = 20,200 \text{ yen}$$

Hence, the cost of the taxi journey from Tokyo to Narita Airport is 20,200 yen

b) At Narita Airport, Reina changed ¥ 71 190 into New Zealand dollars (NZ\$).  
The exchange rate was NZ\$1 = ¥ 56.5.  
How many New Zealand dollars did she receive?

**Answer:**

*To calculate the amount of New Zealand dollars (NZD) she received, we need to convert the amount of yen she exchanged into NZD. The exchange rate was NZ\$1 = ¥56.5. Therefore, the amount of NZD Reina received is:*

$$71,190 \div 56.5 = 1,259.47 \text{ NZD}$$

*Hence, Reina received 1,259.47 NZD*

**Question 12**

The air fare from Singapore to Stockholm can be paid for in Singapore dollars (S\$) or Malaysian Ringitts (RM).

One day the fare was S\$740 or RM1900 and the exchange rate was S\$1= RM2.448 .

How much less would it cost to pay in Singapore dollars?

Give your answer in Singapore dollars correct to the nearest Singapore dollar.

**Answer:**

*First, we need to convert the fare in Malaysian Ringitts to Singapore dollars using the given exchange rate. So,  $RM1900 \div 2.448 = S\$776.45$  (rounded to the nearest cent)*

*So,  $S\$776.45 - S\$740 = S\$36.45$  Rounded to the nearest Singapore dollar, it would cost S\$36 less to pay in Singapore dollars. Then, we subtract the fare in Singapore dollars from this converted amount to find out how much less it would cost to pay in Singapore dollars. So,  $S\$776.45 - S\$740 = S\$36.45$  Rounded to the nearest Singapore dollar, it would cost S\$36 less to pay in Singapore dollars.*

### Question 13

In France, the cost of one kilogram of apricots is €3.38 .

In the UK, the cost of one kilogram of apricots is £4.39 .

£1 = €1.04.

Calculate the difference between these prices.

Give your answer in pounds (£)

### Answer:

*First, we need to convert the cost of apricots in France from euros to pounds. To do this, we divide the cost in euros by the exchange rate. So,  $€3.38 \div €1.04 = £3.25$  approximately. Then, we subtract this amount from the cost in the UK to find the difference. So,  $£4.39 - £3.25 = £1.14$ .*

*Therefore, the difference between the prices is £1.14.*

### Question 14

Michel changed \$600 into pounds (£) when the exchange rate was £1 = \$2.40.

He later changed all the pounds back into dollars when the exchange rate was £1 = \$2.60.

How many dollars did he receive?

### Answer:

*Michel exchanged \$600 into pounds when the exchange rate was £1 = \$2.40. Therefore, he received £250 1.*

*Later, Michel changed all the pounds back into dollars when the exchange rate was £1 = \$2.60. Therefore, he received \$650 1.*

### Question 15

Ricardo changed \$600 into pounds (£) when the exchange rate was \$1 = £0.60.  
He later changed all the pounds back into dollars when the exchange rate was \$1 = £0.72.  
How many dollars did he receive?

#### Answer:

*First, Ricardo changed \$600 into pounds. The exchange rate was \$1 = £0.60. So, he received  $600 * 0.60 = £360$ . Then, he changed all the pounds back into dollars. The exchange rate was \$1 = £0.72. So, he received  $360 / 0.72 = \$500$ .*

*Therefore, Ricardo received \$500.*

### Question 15

In January Sunanda changed £25 000 into dollars when the exchange rate was \$1.96 = £1.  
In June she changed the dollars back into pounds when the exchange rate was \$1.75 = £1.  
Calculate the profit she made, giving your answer in pounds (£)

#### Answer:

*First, we need to calculate how many dollars Sunanda got in January. She changed £25 000 into dollars at an exchange rate of \$1.96 = £1. So, she got  $25000 * 1.96 = \$49000$ .*

*Then, in June, she changed the dollars back into pounds when the exchange rate was \$1.75 = £1. So, she got  $49000 / 1.75 = £28000$ . The profit she made is the difference between the amount she got in June and the amount she had in January. So, the profit is  $£28000 - £25000 = £3000$ .*

### Question 16

In January Sunanda changed £25 000 into dollars when the exchange rate was  $\$1.96 = \pounds 1$ .  
In June she changed the dollars back into pounds when the exchange rate was  $\$1.75 = \pounds 1$ .  
Calculate the profit she made, giving your answer in pounds (£)

### Answer:

*To calculate the profit Sunanda made, we need to find the difference between the amount of pounds she received in June and the amount of pounds she spent in January.*

*In January, Sunanda exchanged £25,000 into dollars at an exchange rate of  $\$1.96 = \pounds 1$ . This means that she received \$49,000 in exchange for her £25,000 1.*

*In June, Sunanda changed her dollars back into pounds when the exchange rate was  $\$1.75 = \pounds 1$ . This means that she received £28,000 in exchange for her \$49,000 1.*

*Therefore, Sunanda made a profit of £3,000 ( $\pounds 28,000 - \pounds 25,000$ )*

### Question 17

A holiday in Europe was advertised at a cost of €245.  
The exchange rate was  $\$1 = \pounds 1.06$ .  
Calculate the cost of the holiday in dollars, giving your answer correct to the nearest cent

### Answer:

*First, we need to convert the cost of the holiday from euros to dollars. To do this, we multiply the cost in euros by the exchange rate. So,  $\pounds 245 * \$1.06 = \$259.7$*

*Therefore, the cost of the holiday in dollars is approximately \$259.70.*



## Question 18

In April 2001, a bank gave the following exchange rates.

1 euro = 0.623 British pounds.

1 euro = 1936 Italian lire.

(a) Calculate how much one pound was worth in lire.

### Answer:

*First, we need to find out how many lire 1 pound is equivalent to. We know that 1 euro is equivalent to 0.623 pounds, so 1 pound is equivalent to  $1/0.623 = 1.60513$  euros.*

*Next, we know that 1 euro is equivalent to 1936 lire, so 1.60513 euros is equivalent to  $1.60513 * 1936 = 3107.97$  lire. Therefore, one pound was worth approximately 3108 lire.*

(b) Calculate how much one million lire was worth in pounds

### Answer:

*First, we need to find out how many euros one million lire is. We know that 1 euro = 1936 lire, so we can divide one million lire by 1936 to find out how many euros it is.  $1,000,000 \text{ lire} / 1936 \text{ lire/euro} = \text{approximately } 516.46 \text{ euros}$ .*

*ext, we need to convert this amount to pounds. We know that 1 euro = 0.623 pounds, so we can multiply the amount in euros by this exchange rate to find out how many pounds it is.  $516.46 \text{ euros} * 0.623 \text{ pounds/euro} = \text{approximately } 321.71 \text{ pounds}$ . So, one million lire was worth approximately 321.71 pounds in April 2001.*

## Question 19

Alejandro goes to Europe for a holiday.

He changes 500 pesos into euros at an exchange rate of 1 euro = 0.975 pesos.

How much does he receive in euros? Give your answer correct to 2 decimal places.

### Answer:

*First, we need to find out how many euros Alejandro gets for 1 peso. Since 1 euro is equal to 0.975 pesos, we can find this by dividing 1 by 0.975.  $1 / 0.975 = 1.02564$  euros (approximately)*

*Answer*

*Next, we multiply this amount by the total number of pesos Alejandro is exchanging, which is 500.  $1.02564 * 500 = 512.82$  euros So, Alejandro receives approximately 512.82 euros for his 500 pesos.*

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