

CURRENCY CONVERSION

This material contains solved past papers. Every question bears the examination year and the original serial number.

18 (a) Omar changed 800 rands into dollars when the rate was \$1 = 6.25 rands.

0580/2, 0581/2 Jun02

(i) How many dollars did Omar receive?

$$\begin{aligned} \$1 &= 6.25 \text{ rands} \\ \therefore \$x &= 800 \text{ rands} \end{aligned} \quad \left. \vphantom{\begin{aligned} \$1 &= 6.25 \text{ rands} \\ \therefore \$x &= 800 \text{ rands} \end{aligned}} \right\} \therefore x = 800 \div 6.25 = \$128$$

Answer (a)(i) \$ \$128 [1]

(ii) Three months later he changed his dollars back into rands when the rate was \$1 = 6.45 rands. How many extra rands did he receive?

$$\begin{aligned} \$1 &= 6.45 \text{ rands} \\ \therefore \$128 &= 128 \times 6.45 = 825.6 \text{ rands} \end{aligned} \quad \left. \vphantom{\begin{aligned} \$1 &= 6.45 \text{ rands} \\ \therefore \$128 &= 128 \times 6.45 = 825.6 \text{ rands} \end{aligned}} \right\} \therefore \text{He had } (825.6 - 800) \text{ rands} \\ &= 25.6 \text{ rands}$$

Answer (a)(ii) 25.6 rands [1]

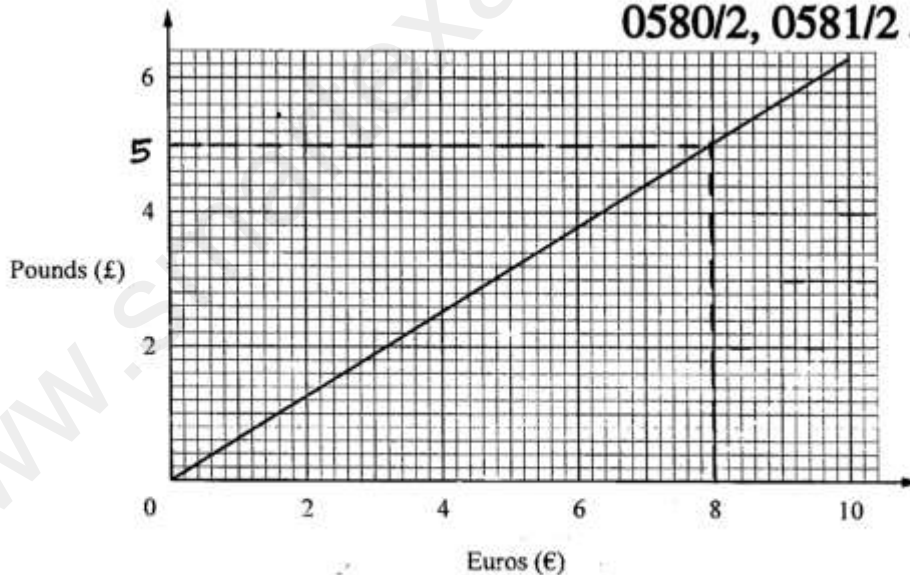
(b) Omar's brother invested 800 rands for three months at a simple interest rate of 12% per year. How much interest did he receive?

$$\begin{aligned} P &= 800 \text{ rands} \\ N &= 3 \text{ months} = \left(\frac{1}{4}\right)^{\text{th}} \text{ year} \\ R &= 12\% \end{aligned} \quad \left. \vphantom{\begin{aligned} P &= 800 \text{ rands} \\ N &= 3 \text{ months} = \left(\frac{1}{4}\right)^{\text{th}} \text{ year} \\ R &= 12\% \end{aligned}} \right\} S.I = (PNR) \div 100 = (800 \times \frac{1}{4} \times 12) \div 100 \\ &= 24$$

Answer (b) 24 rands [2]

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

0580/2, 0581/2 Jun 2003



(a) Change £5 into euros.

From the graph

Answer (a) € 8 [1]

- 6 George and his friend Jane buy copies of the same book on the internet.
George pays \$16.95 and Jane pays £11.99 on a day when the exchange rate is \$1 = £0.626.

Calculate, in dollars, how much more Jane pays.

0580/22/M/J/13

Exchange rate \Rightarrow \$1 = £0.626

George pays = \$16.95

Jane pays = £11.99

\therefore \$1 = £0.626

Hence \$x = £11.99

$\Rightarrow 0.626x = 11.99$

$\Rightarrow x = 11.99 \div 0.626$
 $= 19.15$

\therefore Jane pays

\$19.15 - \$16.95

= \$2.2 more than
George.

Answer \$ 2.2 [2]

- 10 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?

Highest Conversion | Lowest Conversion
1\$ = €1.3401 | 1\$ = €1.3199

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\therefore Conversion diff = €0.0202

\therefore \$500 = €500 \times 0.0202 = 10.1

Answer € 10.1 [3]