CIE-MATHS.ESY.ES

For Examiner's Use

1 **(a)** Vince and Wendy share \$2000 in the ratio Vince : Wendy = 19 : 21.

Calculate the amount of money that Vince receives.

$\frac{19}{19+21} \times \$2000 = \$950$

Answer(a) \$ 950 [2]

(b) Wendy has \$265 to spend on some chairs.
The chairs cost \$37 each.

Work out the largest number of chairs she can buy.

$\frac{\$265}{\$37} = 7.162162162\ldots$
≈ 7

Answer(b) 7 [2]

(c) Wendy shares \$200 between her three children Jake, Karl and Lana.
She gives 27% of the money to Jake and $\frac{2}{5}$ of the money to Karl.

Work out the amount of money she gives to Lana.

Jake : $\frac{27}{100} \times \$200 = \$54$

Karl : $\frac{2}{5} \times \$200 = \$80$

Lana : \$200 − \$54 − \$80
= \$66

Answer(c) \$ 66 [3]

(d) Wendy invests \$500 at a rate of 4% per year **compound** interest.

Calculate the total amount of **interest** she receives at the end of 2 years.
Give your answer correct to the nearest dollar.

Total amount $= 500\left(1+\frac{4}{100}\right)^2$
$= 500(1.04)^2$
$= \$540.80$

Interest = \$540.80 − \$500
= \$40.80
$\approx \$41$

Answer(d) \$ 41 [4]

© UCLES 2012