## Arithmetic (Q 1, Paper 1)

2009
1 (a) Conor and Alice share 50 apples in the ratio 3:7.
(i) How many apples does Conor get?
(ii) How many apples does Alice get?
(b) Barbara works 35 hours a week and she is paid $€ 12 \cdot 60$ per hour.
(i) Find her total weekly pay.
(ii) Barbara pays tax at the rate of $20 \%$ on all her income and has weekly tax credits of €53. Calculate her weekly take-home pay.
(iii) In one particular week, Barbara worked 4 additional hours at the same rate of pay. By how much did her take-home pay increase that week?
(c) $€ 7500$ was invested for 2 years at $r \%$ per annum compound interest.
(i) The amount of the investment at the end of the first year was $€ 7860$. Find the value of $r$.
(ii) At the start of the second year $€ X$ was withdrawn from the account. The interest earned during the second year was $€ 252$. Find the value of $X$.
Answers
1
(a) (i) 15
(ii) 35
(b) (i) $€ 441$
(ii) €405.80
(iii) €40.32
(c) (i) $4.8 \%$
(ii) €2610

