

ARITHMETIC (Q 1, PAPER 1)

2006

- 1 (a) €320 is $\frac{4}{9}$ of a prize fund. Find the total prize fund.
- (b) Aoife pays a fixed monthly charge of €15 for her mobile phone. This charge includes 100 free text messages and 50 minutes free call time each month. Further call time costs 28 cent per minute and additional text messages cost 11 cent each. In one month Aoife sends 140 text messages and her call time is 2 hours.
- (i) Find the total cost of her fixed charge, text messages and call time.
- (ii) VAT is added to this cost at the rate of 21%.
Find the amount paid, including VAT.
- (c) The standard rate of income tax is 20% and the higher rate is 42%. Colm has weekly tax credits of €50 and a standard-rate cut-off point of €240. Until recently, Colm had a gross weekly income of €900.
- (i) Calculate the tax Colm paid each week.
- (ii) After getting a pay rise, Colm's weekly after-tax income increased by €20.30. Calculate the increase in Colm's gross weekly income.

ANSWERS

- 1 (a) €720
(b) (i) €39 (ii) €47.19
(c) (i) €275.20 (ii) €35