2001

1   (a) A cookery book gives the following instruction for calculating the amount of time
         for which a turkey should be cooked:

         "Allow 15 minutes per 450 grammes plus an extra 15 minutes."

         For how many hours and minutes should a turkey weighing 9 kilogrammes be
         cooked?

    (b) (i) The answer to $3.58 + 2.47$ was given as 6.50.
              What was the percentage error correct to one decimal place?

         (ii) Calculate the value of

              $$\frac{3.1 \times 10^5 - 1.5 \times 10^4}{5.9 \times 10^6}$$

              and write your answer as a decimal number.

    (c) IR£5000 was invested for 3 years at compound interest.

         The rate for the first year was 4%. The rate for the second year was $4\frac{1}{2}$%.
         (i) Find the amount of the investment at the end of the second year.

              At the beginning of the third year a further IR£4000 was invested.
              The rate for the third year was r %.
              The total investment at the end of the third year was IR£9811.36.

         (ii) Calculate the value of r.

ANSWERS
1   (a) 5 hrs 15 mins
     (b) (i) 7.4%   (ii) 0.05
     (c) (i) £5434   (ii) 4