1. Toby invested £4500 for 2 years in a savings account. He was paid 4% per annum compound interest. How much did Toby have in his savings account after 2 years?

2. The value of a car depreciates by 35% each year. At the end of 2007 the value of the car was £5460. Work out the value of the car at the end of 2006.

3. Mario invests £2000 for 3 years at 5% per annum compound interest. Calculate the value of the investment at the end of 3 years.

4. Derek invests £154 500 for 2 years at 4% per year compound interest. Work out the value of the investment at the end of 2 years.
5. Henry invests £4500 at a compound interest rate of 5% per annum.
   At the end of $n$ complete years the investment has grown to £5469.78.
   Find the value of $n$.

6. A company bought a van that had a value of £12 000
   Each year the value of the van depreciates by 25%.
   Work out the value of the van at the end of three years.

7. Bill invests £500 on 1st January 2004 at a compound interest rate of $R\%$ per annum.
   The value, £$V$, of this investment after $n$ years is given by the formula
   \[ V = 500 \times (1.045)^n \]
   (a) Write down the value of $R$.

   \[ R = \text{.....................} \]  
   (1)

   (b) Use your calculator to find the value of Bill’s investment after 20 years.
8. Gwen bought a new car.
   Each year, the value of her car depreciated by 9%.

   Calculate the number of years after which the value of her car was 47% of its value when new.

9. Liam invests £6200 for 3 years in a savings account.
   He gets 2.5% per annum compound interest.

   How much money will Liam have in his savings account at the end of 3 years?

10. Toby invested £4500 for 2 years in a savings account.
    He was paid 4% per annum compound interest.

    (a) How much did Toby have in his savings account after 2 years?

Jaspir invested £2400 for $n$ years in a savings account.
He was paid 7.5% per annum compound interest.

At the end of the $n$ years he had £3445.51 in the savings account.

(b) Work out the value of $n$. 
Viv wants to invest £2000 for 2 years in the same bank.

The International Bank

Compound Interest

4% for the first year
1% for each extra year

The Friendly Bank

Compound Interest

5% for the first year
0.5% for each extra year

At the end of 2 years, Viv wants to have as much money as possible.

Which bank should she invest her £2000 in?