WORKING WITH FINANCE SOLVER

1. Use a financial calculator to find the balance, correct to the nearest cent, of each of the following reducing-balance loans after the given number of compounding periods.

	Principal	interest rate	Compounding	Payment per period	Balance after ...
a	$8000	4.5%	Monthly	$350	6 months
b	$25 000	7.8%	Monthly	$1200	1 year
c	$240 000	8.3%	Quarterly	$7900	5 years
d	$75 000	6.9%	Quarterly	$4800	2 years
e	$50 000	4.6%	Weekly	$350	1 year

2. Andrew borrows $20000 at an interest rate of 7.25% per annum, compounding monthly. This loan will be repaid over 4 years with payments of $481.25 each month.
    a. How much, correct to the nearest cent, does Andrew owe after 3 years?

    b. What is final payment amount Andrew must make to fully repay the loan after 4 years?

3. Sipho borrows $10000 to be repaid in equal payments over a period of 5 years. Interest is charged at the rate of 8% per annum, compounding monthly. Find:
    a. the monthly payment amount, correct to the nearest cent

    b. the total cost of repaying the loan to the nearest dollar

    c. the total amount of interest paid to the nearest dollar.

4. A loan of $90000 is to be repaid over a period of 30 years. Interest is charged at the rate of 11% per annum compounding monthly. Find:
   a. the monthly payment correct to the nearest cent

   b. the total cost of paying off the loan to the nearest dollar

   c. the total amount of interest paid, correct to the nearest 10 dollars.

5. An amount of $150000 is borrowed for 25 years at an interest rate of 6.8% per annum, compounding monthly.
   a. What are the monthly payments for this loan?

   b. How much is still owing at the end of 3 years?

After 3 years, the interest rate rises to 7.2% per annum.
   c. What are the new monthly payments that will see the loan paid in 25 years.

   d. How much extra does it now cost (to the nearest 10 dollars) to repay the loan in total?