5.1 Compound Interest

To calculate any component of compound interest:

APPS and choose 1: Finance (OR TI-83 only, choose simply Finance)
Choose 1: TVM Solver
Enter the known values.
Set PMT = END (make payments at the end of the cycle)
Place the cursor on the unknown value.
SOLVE: Alpha and then Enter

Always 5 of these 6 values are known. Solve for the missing value.
N = number of compounding periods
I% = interest rate as a %
PV = present value
PMT = payment amount
FV = future value
P/Y = C/Y

- P/Y = payments per year
- C/Y = compound periods per year

PMT: END BEGIN when payments occur during the cycle. We always use END.

Different Compounding Periods:
Use the following to determine the correct value of N in the TVM Solver: N = *mt*.

Compounding	***m***
annually:	1
semi-annually:	2
quarterly:	4
monthly:	12
weekly:	52
daily:	365

To calculate the effective rate:

Finance
Choose C: Eff(
Usage Eff(*I* percent interest, *m* compounds per year)
For example: Eff(8, 365) gives the effective rate for 8% annual interest compounded daily.
Press Enter.

5.2 Annuities
5.3 Amortization and Sinking Funds

To do a line of this in the calculator: (Really, this is best done with Excel)

1. Use the TVM Solver to calculate the payments.
2. Change N to the number of payments remaining on the loan.
3. Solve for PV. This is what you still owe the bank (outstanding principal).
4. Calculate equity = value of item – amount owed