C. Partial Fractions

In finding indefinite integrals using partial fractions, it is sometimes necessary to solve a system of linear equations. This can sometimes get students bogged down in what is not really an important part of the problem. The TI-85 has a nice simultaneous equations feature, SIMUL (2ND/STAT) which is easy to use. I will not go into the details here. Instructions are on page 14-10 of the manual but you could probably do it without reading the manual; it's almost self-explanatory. It works only for n equations in n unknowns and for a nonsingular coefficient matrix but you should always have these conditions satisfied for the partial fractions applications.