

INTEGRATION TECHNIQUES

This review of integration techniques is in no way complete. It is vital for your success that you attempt a large number of problems from the text (even more than are assigned). There is no substitute for practice and experience. I hope that this guide helps you organize your studying.

On page 495 of the text you can see a table of the integrals we can do in one step. Really, the integrals from this table that I want you to assume are doable in one step are 1-14 and 17. Those are the ones you can assume. If your integral is not one of those, then you need some simplifying method. The first thing you should do is look for any possible substitutions or algebraic simplifications. Then you should try one of our four new methods. These methods, and when to choose them, are illustrated below:

