How to make homework an effective learning tool is a current question that we need to answer. The options for teaching and learning Mathematics online are increasing steadily. I have found WebAssign, an online homework system, to be an indispensable part of my online Calculus course. Besides using WebAssign for regular homework, I have found that mixing it in with Maple projects and also as tutorials and short reviews have contributed to student retention and better grades. When setting up assignments, I have separated exercises into tutorials for each section. They include 2 or 3 WebAssign tutorial problems which take a student step by step through the essential concepts and may include videos. Before working the actual WebAssign assignment the student can work these as practice. Each week I cover 2 sections and set the course up as a MWF class. After every 2 or 3 sections, I have set up a review in WebAssign for those sections as a whole class period. I have also included WebAssign problems as an introduction problem in Maple labs. The Maple labs are tied to real life applications. I will show how I use WebAssign, my policies, as well as the advantages and lessons learned from my experience using this online homework system. (Received September 02, 2009)