Since we started redesigning some of our mathematics courses, the creation of efficient homework assignments became our number one priority. The online tools available on the Pearson’s MyMathLab platform that we use for our hybrid courses could be helpful for one course but could create problems for other. This presentation will show how I changed the content of the homework and how I use those tools since I started designing and teaching such courses. I will also address some challenges I had with these online assignments and show how I try to make them efficient so that they will prepare my students not just for quizzes and tests but for the other courses they will take and for their profession. (Received September 19, 2016)