The goal of the Cognitively-Based Assessment of, for, and as Learning (CBAL™) research initiative at ETS is to develop research-based systems of summative and formative assessments in mathematics and English language arts that are meaningful learning experiences in and of themselves. In mathematics, extended computer-delivered tasks have been written, each built around a single theme. Each task consists of about 10 to 15 individual questions involving a variety of response types, including numeric responses, equations, graphs, short text responses, and extended explanations. Many of these responses are automatically scored. In this talk, I will share some of the Do’s and Don’t’s that we have learned while working on this project. These lessons we have learned involve both how to present mathematics test items on the computer and how to write them so that they can be reliably scored automatically. This information will be useful to anyone writing mathematics test questions for presentation online, especially if they are to be automatically scored. (Received September 09, 2014)