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Making first contact and getting a firmer grip on mathematical concepts using CAS

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For twenty years now at ETS, all students have been bringing their hand-held CAS calculator to class. This environment has required that we change how and what we teach. The focus has shifted away from rote and drill to an approach emphasizing graph exploration, the use of animations and other tools with the aim that the student will acquire a deeper understanding of the mathematical concepts and hopefully develop a better intuition. In this talk, we will share the perspective we have gained in the following broad questions.

- How can we use technology to illustrate new concepts?
- What tasks will help students make sense of these concepts?

We will provide examples from our calculus courses using Nspire CAS and Geogebra.

Keywords

Animation, Illustration, Task