

1086-97-882

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Online Mathematics Pedagogy: MathLynx. Preliminary report.

MathLynx is the first dynamically generated interactive pedagogy environment. It is purely web-based, relying on multiple open-source softwares: MathJax for presentation of LaTeX, jsxGraph for 2-d graphics, three.js for 3-d graphics, a customized MathDox formula editor for client mathematical entry, all communicating with a server-side Sage engine. With such an array of tools, we have created a cross-linked library of mathematical topics for gateway level courses, incorporating many of the features of other interactive texts, and extending well beyond them.

Here we will present a tour of the library, including special features available for instructors and institutions. We will briefly discuss how it has been used and student reactions. (Received September 14, 2012)