

Dynamic Applications for Learning and Exploring Mathematics Using Computer Algebra

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We discuss designing self-contained electronic documents that form a microworld for student investigations. The documents include a CAS application in which students engage in ‘sandboxed’ mathematical exploration. The inquiry-based exploration is led by a set of questions in the document that guide students, experimenting in the computer algebra and dynamic geometry microworlds, that are formulated under the *Action-Consequence-Reflection paradigm*.

Keywords

Dynamic computer algebra pedagogical applications, Action-Consequence-Reflection paradigm

References

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