

The aim of this diploma thesis is to create derivative-focused web pages as a new part of a high school mathematics educational web portal. The web portal is operated by the Department of Mathematics Education, Faculty of Mathematics and Physics, Charles University in Prague. It is primarily intended as an additional learning resource for high school students. The diploma thesis consists of two main parts. The first part describes a search for and evaluation of similar web pages in Czech, Slovak, English and Hebrew, which deal with the topic of derivative. The second part details the creation of new web pages. In creating the web pages the author integrated interactive elements based on JavaScript, and interactive applets created with use of GeoGebra software. To display mathematical expressions on the web, the author used the technology MathJax, which works with languages of the typesetting systems TeX and LaTeX.