A.   *Secant* was written by Matthew C. Drew.   It was developed in support of the Integrated First-Year Curriculum in Science, Engineering, and Mathematics at Rose-Hulman Institute of Technology.   This curriculum project is supported by the National Science Foundation, the General Electric Foundation, and Lilly Endowment, Inc.   If you are interested in this or any other application written for the Rose-Hulman Institute of Technology Integrated First Year Curriculum, please contact us at **ifycsem@nextwork.rose-hulman.edu**.   The following people are currently serving as professors for the curriculum and would welcome your comments and questions:

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B.   *Secant* best fits in the   mathematics category.

C.   *Secant* graphically demonstrates the approximation of   the derivative of a function using secant lines.   Several functions are available for experimentation and the incremental distance (delta x) can be changed to show the relationship between increment size and approximation accuracy. The application displays the function, the secant line, the derivative and the approximated derivative through a user-friendly interface.

D. *Secant* is used as part of the Integrated First Year Curriculum in calculus classes to introduce the concepts of derivatives and secant lines as well as numerical methods.

E. *Secant* was developed under NeXTSTEP 2.1.

F. This application requires no special installation.

G. The Documentation folder included with the application is required for online documentation built into the application.   If it is removed, the application will

still function properly, except for Help.