Throw Away Your Mathematical Handbook! Undergraduate Physics with Wolfram—Alpha, a FREE(!) Internet-Based Mathematical Engine CRAIG W. LOONEY, Merrimack College — Wolfram—Alpha (http://www.wolframalpha.com/), a free internet-based mathematical engine released earlier this year, represents an orders-of magnitude advance in mathematical power freely available - without money, passwords, or downloads - on the web. Wolfram—Alpha is based on Mathematica, so it can plot functions, take derivatives, solve systems of equations, perform symbolic and numerical integration, and more. These capabilities (especially plotting and integration) will be explored in the context of topics covered in upper level undergraduate physics courses.

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