

# Revisualizing the Integral

Many students understand the connection between the Riemann sum definition of an integral and its context as area under a curve. However, when the fundamental theorem of calculus presents the relationship of integrals to anti-derivatives, many are surprised by the result. This presentation gives a way of revisualizing the integral so that its connection to anti-derivatives is more of an “Aha!” than “Surprise!” Several interactive graphs are used to illustrate the concept for both 2D integrals and 3D vector integrals. This presentation is available to view or download at the following link: <http://faculty.whatcom.ctc.edu/lsingleton/IntegralPresentation.cdf> To view this, you will need the Wolfram CDF Player which is available for free at the following website: <http://www.wolfram.com/cdf-player/>.

