1035-W1-536 Franklin Mendivil* (franklin.mendivil@acadiau.ca). Using regulated functions to teach integration.

A regulated function is the uniform limit of step functions. The class of regulated functions makes a convenient class of functions in which to introduce a theory of integration as (most of) the proofs are all very similar: prove for step functions and then extend by limits. This avoids much of the manipulations with Riemann Sums and points the way for more advanced theories of integration. (Received September 10, 2007)