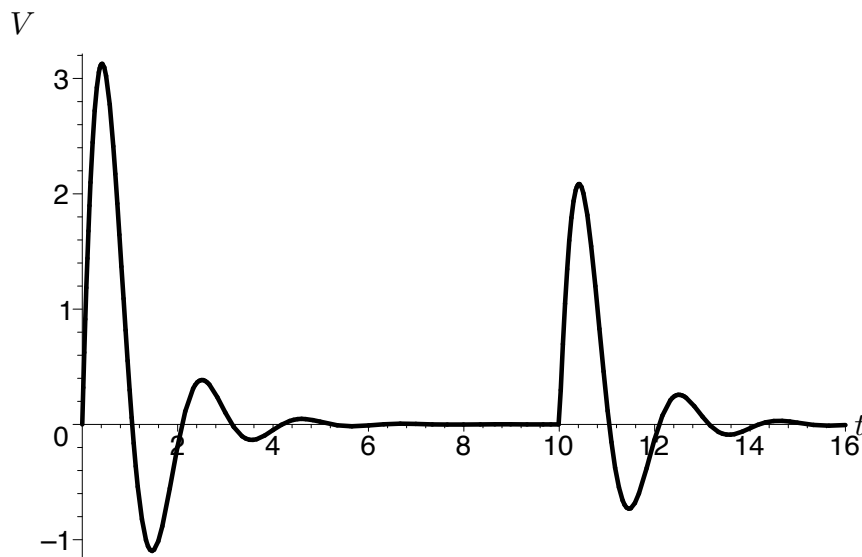


Dirac Forcing

Consider the equation

$$\frac{\ddot{V}}{10} + \frac{\dot{V}}{5} + V = \delta(t - 10), \quad V(0) = 0, \quad \dot{V}(0) = 15.$$



Note the extra “kick” the system receives at $t = 10$. It can be surmised from the graph (and indeed it is true) that \dot{V} is discontinuous at $t = 10$, as shown below.

