A switching current source is connected to a 0.5-H inductor. The source current rises from –4 mA to +6 mA in 1 ms, then decreases back to –4 mA in 0.5 ms. The cycle repeats continuously.

Make a good *quantitive* sketch of the inductor voltage as a function of time. (A quantitative sketch includes numbers — for intercepts, peak values, asymptotes, and slopes.)

How would the sketch change if the entire downward ramp lasted only 0.05 ms?