Chapter 6, Solution 74.

$$RC = 0.01 \times 20 \times 10^{-3} \text{ sec}$$

$$v_o = -RC \frac{dv_i}{dt} = -0.2 \frac{dv}{dt} m \sec t$$

$$v_{o} = \begin{bmatrix} -2V, & 0 < t < 1 \\ 2V, & 1 < t < 3 \\ -2V, & 3 < t < 4 \end{bmatrix}$$

Thus $v_o(t)$ is as sketched below:

