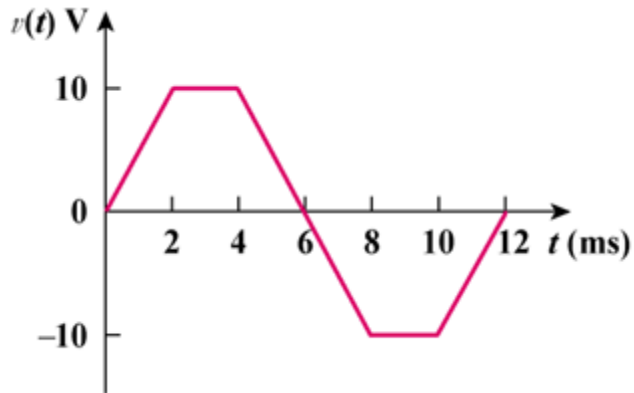


- P1** The voltage waveform below is applied across a $30\text{-}\mu\text{F}$ capacitor. Sketch the current waveform through it.

Hint: $i(t) = 150\text{mA}$, $10\text{ms} < t \leq 12\text{ms}$



- P2** The current through a 0.5-F capacitor is $6(1-e^{-t})\text{ A}$. Determine the voltage and power at $t=2\text{ s}$. Assume $v(0) = 0$.
Hint: $p(2)$ is between 70W and 80W .

- P3** Find the voltage across the capacitors v_1 and v_2 in the circuit below under dc conditions.
Hint: both voltages are between 29V and 41V .

