2. (a) We use $\varepsilon = -d\Phi_B/dt = -\pi r^2 dB/dt$. For $0 < t < 2.0$ s:

$$\varepsilon = -\pi r^2 \frac{dB}{dt} = -\pi\left(0.12\text{m}\right)^2\left(\frac{0.5\,\text{T}}{2.0\,\text{s}}\right) = -1.1\times10^{-2}\ \text{V}.$$

(b) For 2.0 s $< t <$ 4.0 s: $\varepsilon \propto dB/dt = 0$.

(c) For 4.0 s $< t <$ 6.0 s:

$$\varepsilon = -\pi r^2 \frac{dB}{dt} = -\pi\left(0.12\text{m}\right)^2\left(\frac{-0.5\text{T}}{6.0\text{s}-4.0\text{s}}\right) = 1.1\times10^{-2}\ \text{V}.$$