8. According to Faraday's Law of Electromagnetic Induction the induced voltage is equal to the rate of change of the magnetic flux.

$$\varepsilon = \Delta \phi / t$$

$$\epsilon$$
 = (7.0 T m² - 1.0 T m²) / 2.0 s

$$\varepsilon = 3.0 \,\mathrm{T\,m^2/s}$$