

30. The magnitude of the electric field is given by

$$|E| = \left| -\frac{\Delta V}{\Delta x} \right| = \frac{2(5.0 \text{ V})}{0.015 \text{ m}} = 6.7 \times 10^2 \text{ V/m} .$$

At any point in the region between the plates, \vec{E} points away from the positively charged plate, directly towards the negatively charged one.