



a.) $\Phi_e = \frac{Q_{in}}{\epsilon_0} = \frac{(-4Q + 2Q)}{\epsilon_0} = -\frac{2Q}{\epsilon_0}$ both q_1 & q_2 inside

b.) $\Phi_e = \frac{Q_{in}}{\epsilon_0} = \frac{2Q}{\epsilon_0}$ just q_1 inside