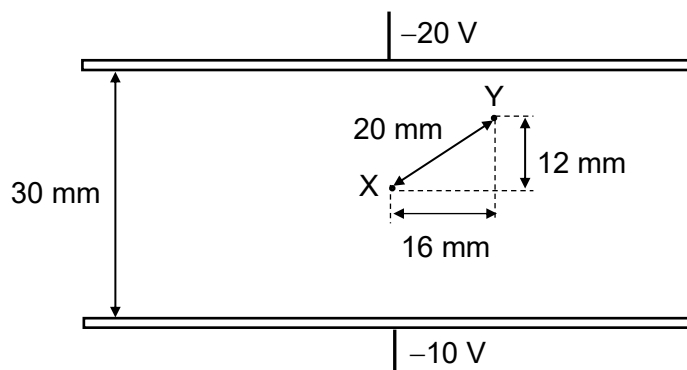


- 19 The diagram shows two large horizontal metal plates situated 30 mm apart. The top and bottom plates are at potentials -20 V and -10 V respectively.



What is the work done by the electric field when a charge of $-5.0\text{ }\mu\text{C}$ is moved from point X midway between the metal plates to point Y?

- A** $-3.3 \times 10^{-5}\text{ J}$ **B** $-2.0 \times 10^{-5}\text{ J}$ **C** $2.0 \times 10^{-5}\text{ J}$ **D** $3.3 \times 10^{-5}\text{ J}$