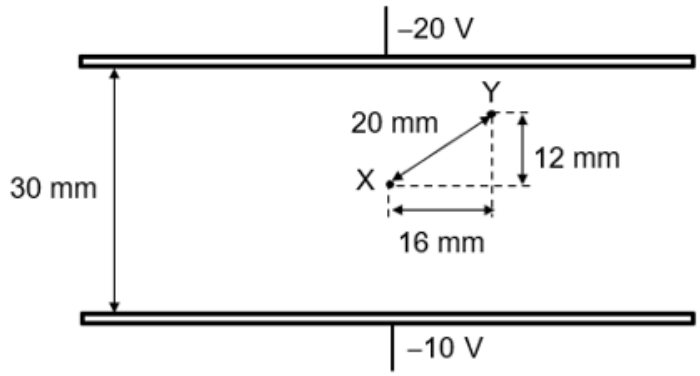
20 The diagram shows two large horizontal metal plates situated 30 mm apart. The top and bottom plates are at potentials -20 V and -10 V respectively. The magnitude of the electric field between the plates is 333 V m^{-1}.



What is the work done by the electric field when a charge of -5.0 μC is moved from point X midway between the metal plates to point Y?

A -3.3×10^{-5} J

B -2.0×10^{-5} J

C 2.0×10^{-5} J

D 3.3×10^{-5} J