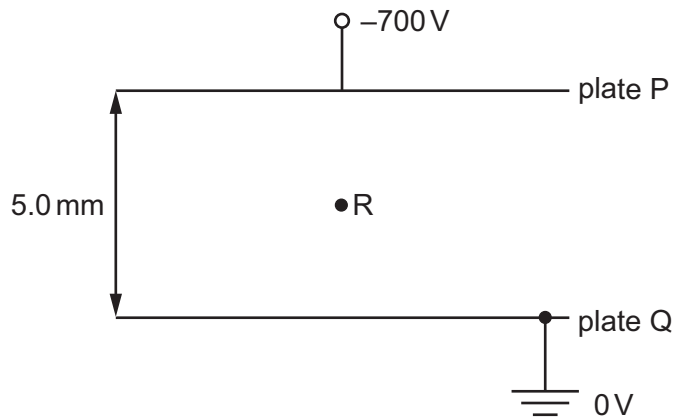


- 31** The diagram shows two parallel metal plates P and Q, separated by a distance of 5.0 mm. There is a potential difference of 700 V between the plates. Plate Q is earthed.



What is the magnitude and direction of the electric field at point R?

- A**  $1.4 \times 10^2 \text{ NC}^{-1}$  from P towards Q
- B**  $1.4 \times 10^2 \text{ NC}^{-1}$  from Q towards P
- C**  $1.4 \times 10^5 \text{ NC}^{-1}$  from P towards Q
- D**  $1.4 \times 10^5 \text{ NC}^{-1}$  from Q towards P