

### Answer on Question #66858-Physics – Electric Circuits

Magnitude of electric field intensity at a point where a  $q = +1 \times 10^{-12}$  coulomb charge experiences a  $F = 1.0$  N force

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#### Solution

The force on charge introduced into the electric field is given by

$$F = qE.$$

Thus, the magnitude of electric field

$$E = \frac{F}{q} = \frac{1}{1 \times 10^{-12}} = 10^{12} \frac{\text{N}}{\text{C}}.$$

**Answer:**  $10^{12} \frac{\text{N}}{\text{C}}$ .