

$$\frac{D}{n_0} = \frac{Rad}{x}$$

$$Rad = D = \frac{x}{n_0} \rightarrow \frac{\mu}{\mu_0} \frac{x}{n_0} = \frac{\mu x}{\mu_0}$$

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عن (cell)

$$Rad = 120 \times \frac{x}{n_0} = \frac{120x}{\mu_0}$$

$$\text{ج) } \frac{D}{n_0} = \frac{\frac{120x}{\mu_0}}{\frac{x}{1}} = 120^\circ$$

$$\text{د) } \frac{D}{n_0} = \frac{\frac{\epsilon x}{\mu}}{\frac{x}{1}} = 1^\circ$$

$$\frac{120 \theta}{q} \rightarrow \frac{D}{n_0} = \frac{G}{\mu_0} \rightarrow \frac{D}{n_0} = \frac{120 \theta}{\frac{q}{\mu_0}} \rightarrow \frac{120 \theta}{10}$$

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$$\frac{D}{n_0} = \frac{x}{\mu} \times \frac{\epsilon \theta}{n_0} = \frac{\epsilon \theta}{\mu}$$

$$\frac{120 \theta}{10} + \frac{\epsilon \theta}{\mu} + 10a = 120$$

$$a = \epsilon^\circ$$

$$\text{cell) } \left(\frac{1}{\mu} \times \frac{1}{\mu} \right) + \left(\frac{\sqrt{\mu}}{\mu} \times \frac{\sqrt{\mu}}{\mu} \right) = \sin^2 \theta \rightarrow -\frac{1}{\epsilon} + \frac{\mu}{\epsilon} = \frac{\mu}{\epsilon} \rightarrow \frac{1}{\mu}$$

$$\sin^2 \theta \rightarrow \frac{1}{\sqrt{\mu}} \times \frac{\sqrt{\mu}}{\sqrt{\mu}} = \frac{1}{\sqrt{\mu}} = \sin \theta \quad \begin{aligned} \tan &= 1 \\ \sin &= +\frac{\sqrt{\mu}}{\sqrt{\mu}} \\ \cos &= +\frac{\sqrt{\mu}}{\sqrt{\mu}} \end{aligned}$$

$$\text{الف) } \left(\frac{1}{\mu} \times \frac{\sqrt{\mu}}{\mu} \right) - \left(\frac{\sqrt{\mu}}{\mu} \times \frac{1}{\mu} \right) = 1 + \mu = 1$$

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$$\frac{\left(\frac{\sqrt{\mu}}{\mu}\right)^{\mu} + 1 + (\sqrt{\mu})^{\mu}}{\sqrt{\mu} - \frac{\sqrt{\mu}}{\mu}} \rightarrow \frac{\frac{\mu}{\mu} + \varepsilon}{\frac{\mu\sqrt{\mu}}{\mu} - \frac{\sqrt{\mu}}{\mu}} = \frac{1\mu\sqrt{\mu}}{4}$$

$$\frac{\frac{\mu\sqrt{\mu}}{\mu} \left(1 - \frac{\mu}{\mu}\right)}{\left(1 - \frac{\mu}{\mu}\right)^{\mu}} \rightarrow \frac{\frac{\mu\sqrt{\mu}}{\mu} \times \frac{1}{\mu}}{\frac{1}{\mu}} = \left(\frac{\varepsilon\sqrt{\mu}}{9}\right) = \frac{\varepsilon\sqrt{\mu} \times 11}{9 \times \mu 4} = \sqrt{\mu} \quad \text{tana}$$

$$\tan \theta = \sqrt{\mu} \rightarrow \tan 40^{\circ} \rightarrow \frac{D}{110} = \frac{Rad}{\pi}$$

$$\frac{40}{110} = \frac{Rad}{\pi} \rightarrow \frac{40}{110} \pi \rightarrow Rad = \frac{\pi}{\mu}$$

$$\frac{\mu(a) - 1}{a - f(1)} = \frac{1f}{1} = 1e$$

$$\tan \theta = a \rightarrow \sin \theta = a \quad \cos \theta = \frac{1}{a}$$

$$\sin \alpha = \frac{4}{10} \rightarrow \frac{4}{10}$$

$$4 = \pi \times \frac{4}{10}$$

$$B^{\mu} + C^{\mu} = AB^{\mu} \rightarrow \mu 4 + C^{\mu} = 100 \quad C = 1$$

$$100 = V + 4 + V + 1 + 10 = 121$$

$$\cos A = \cos 40^{\circ} = \frac{AB}{10} \rightarrow \frac{1}{\mu} = \frac{AB}{10} \rightarrow BC = a$$

$$\cos 80^{\circ} = \frac{\sqrt{\mu}}{\mu} = \frac{a}{AC} \rightarrow \frac{a\sqrt{\mu}}{\mu} \quad a^{\mu} + BD^{\mu} = 10^{\mu}$$

$$CP = a\sqrt{\mu} - a$$

Step 2

$$\sin \theta = \frac{\text{perpendicular}}{\text{hypotenuse}} / \cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}}$$

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$$\sin 40^\circ = \frac{1}{\sqrt{10}}$$

$$\tan \theta = \frac{1}{\mu}$$

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$$\cos 40^\circ = \frac{\mu}{\sqrt{10}}$$

$$y = \frac{\mu}{1 + \mu^2} = 10$$

$$\tan 40^\circ = \mu$$

$$y = \sqrt{10} \rightarrow \sin \theta = \frac{-1}{y} = \frac{-1}{\sqrt{10}} \text{ or } \frac{-1}{\sqrt{10}}$$