

Physics 2

10/12/23

Quiz 5

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$$F = qv \times B \quad q = 1.6 \cdot 10^{-19}$$

$$F = 1.6 \cdot 10^{-19} \begin{vmatrix} \hat{i} & \hat{j} & \hat{k} \\ 25,000 & 42,000 & 0 \\ 0.76 & 0 & 0 \end{vmatrix} = 1.6 \cdot 10^{-19} (0\hat{i} - 0\hat{j} - 31,920\hat{k})$$
$$= -5.1 \cdot 10^{-15} \text{ N } \hat{k}$$