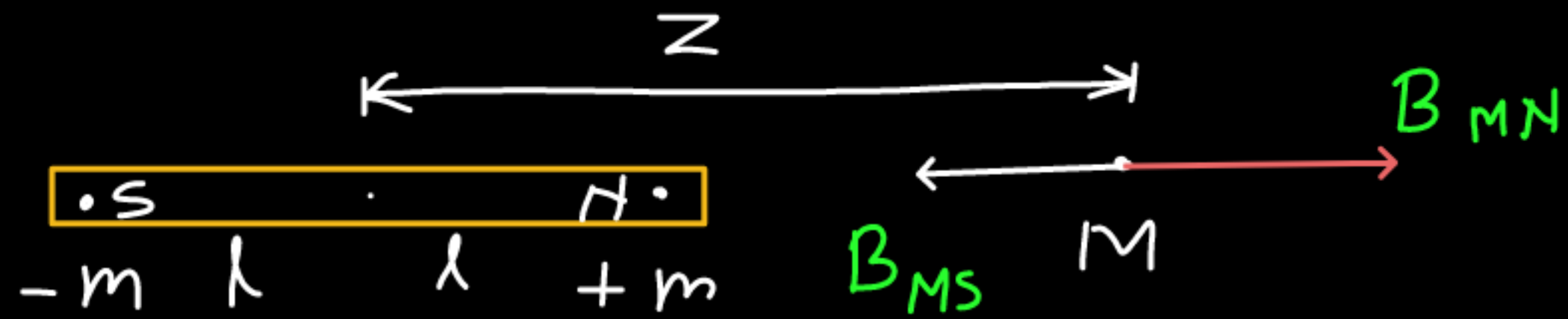


⊗ magnetic field at an axial point.

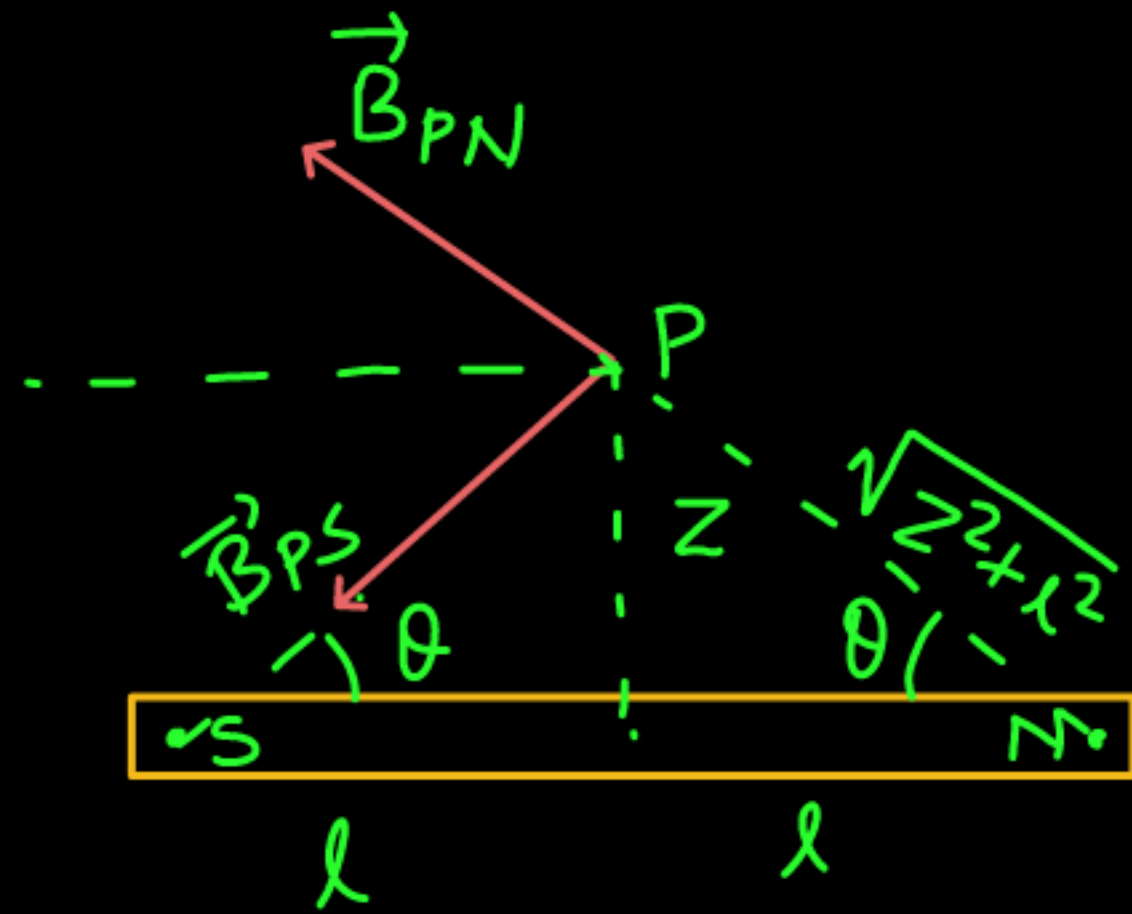


$$|\vec{B}_{MN}| = \frac{\mu_0}{4\pi} \frac{m}{(z-l)^2}$$

$$|\vec{B}_{MS}| = \frac{\mu_0}{4\pi} \frac{m}{(z+l)^2}$$

$$B_{net} =$$

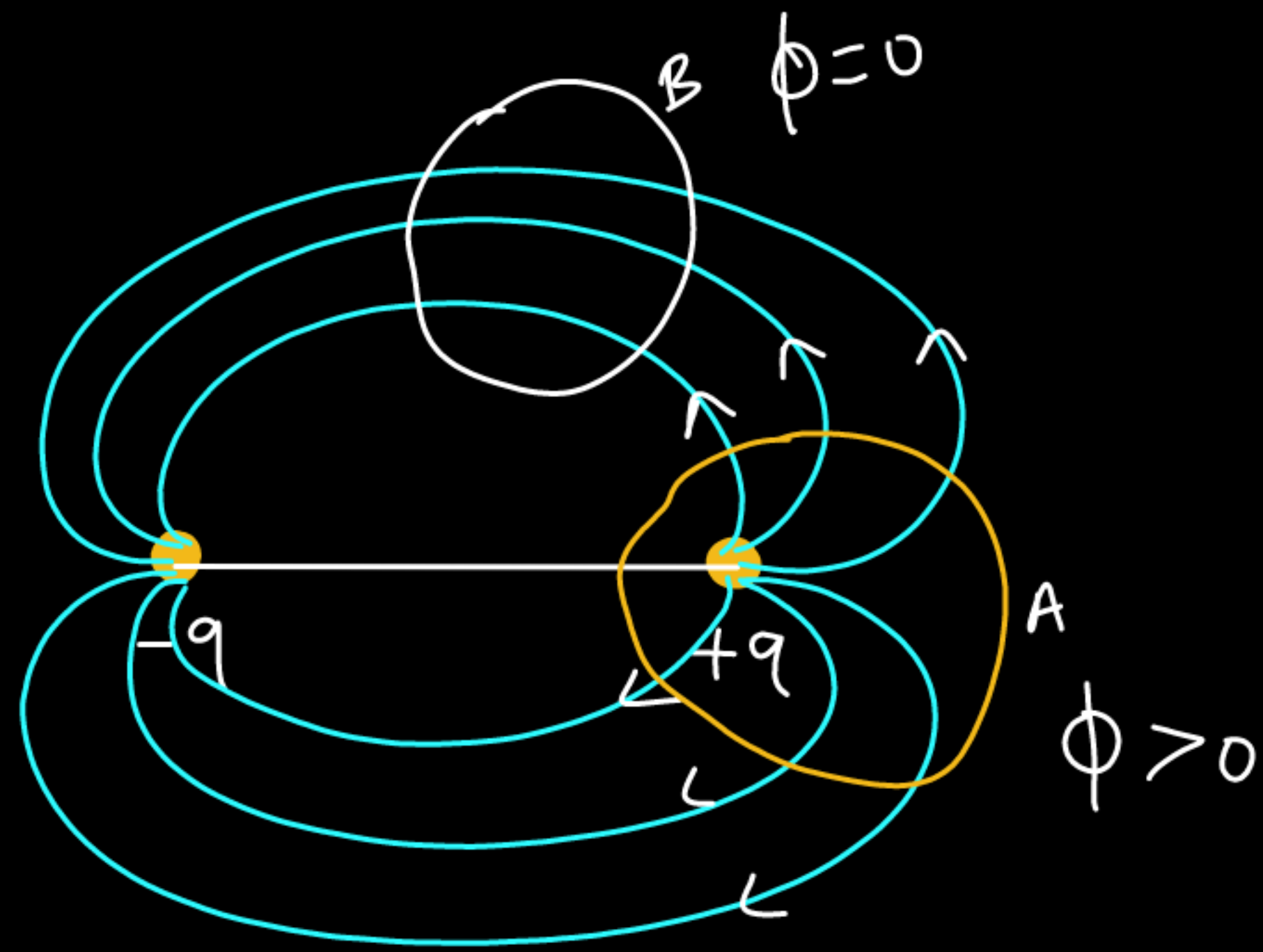
⊗ Magnetic field at an equatorial point.



$$B_P = B_{PN} \cos \theta + B_{PS} \cos \theta$$

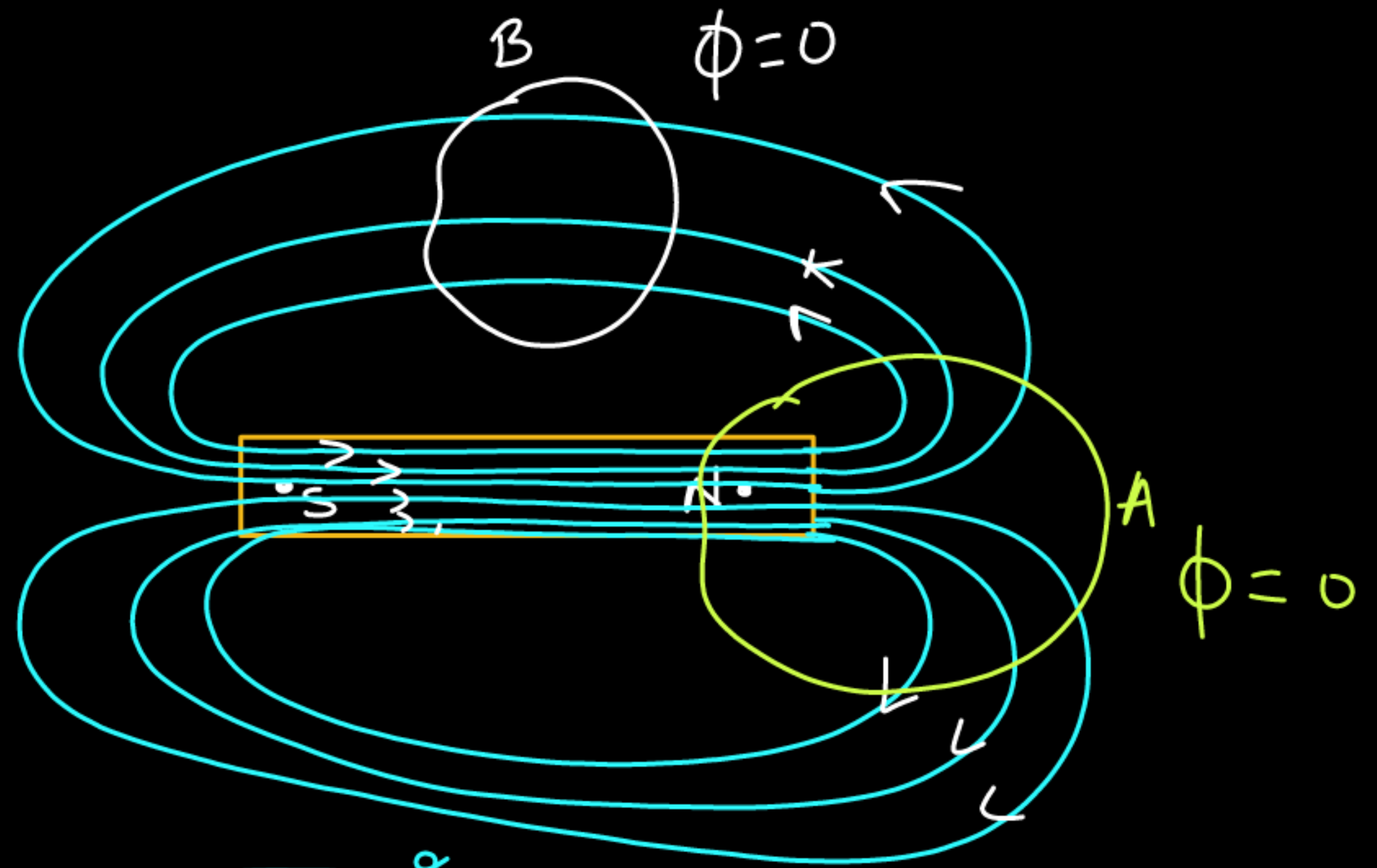
$$|\vec{B}_{PN}| = \frac{\mu_0 m}{4\pi (\sqrt{z^2 + l^2})^2} = \frac{\mu_0 m}{4\pi (z^2 + l^2)}$$

$$|\vec{B}_{PS}| = \frac{\mu_0 m}{4\pi (\sqrt{z^2 + l^2})^2} = \frac{\mu_0 m}{4\pi (z^2 + l^2)}$$



Electric dipole
विद्युत द्विध्रुव

Always Positive to negative



चुम्बक के बाहर $N \rightarrow S$
चुम्बक के अंदर $S \rightarrow N$