Magnitude of angle between current element and magnetic field at application of ampere's law to a straight conductor

0

Derivation for expression of magnetic field at application of ampere's law to a straight conductor

- $$\oint \vec{B}.\vec{dl}$$
- $$\oint Bdl\cos 0$$
- $$B\oint dl$$
- $$B2\pi r$$
- $$B2\pi r = \mu_0 I$$
- $$B = \frac{\mu_0 I}{2\pi r}$$

Expression of magnetic field at application of ampere's law to a straight conductor

- $$B = \frac{\mu_0 I}{2\pi r}$$