

5.12 To find the magnetic field B at P due to a current-carrying wire we use the Biot-Savart law,

$$\vec{B}(\vec{r}) = \frac{\mu_0}{4\pi} I \int \frac{d\vec{l} \times \hat{\mathcal{R}}}{\mathcal{R}^2}$$

What is the *direction* of the infinitesimal contribution $d\mathbf{B}(P)$ created by current in $d\mathbf{l}$?

- A) Up the page
- B) Directly away from $d\mathbf{l}$
(in the plane of the page)
- C) Into the page
- D) Out of the page
- E) Some other direction

