To find the vector potential at P due to a current-carrying wire we use

$$\vec{\mathbf{A}}(\vec{r}) = \frac{\mu_0}{4\pi} \int \frac{\vec{\mathbf{J}}(r')d\tau'}{|R|} \quad \text{or} \quad \vec{\mathbf{A}}(\vec{r}) = \frac{\mu_0}{4\pi} \int \frac{\vec{I}(r')dl'}{|\mathfrak{R}|}$$

In the figure, with dl' shown, what is \Re ?

