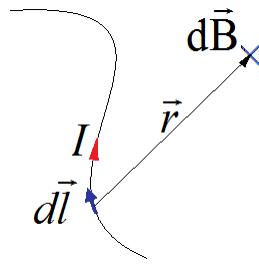


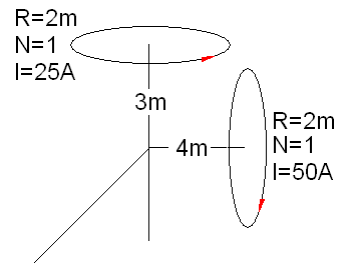
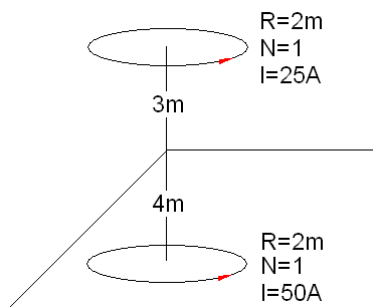
Physics II

Biot and Savart

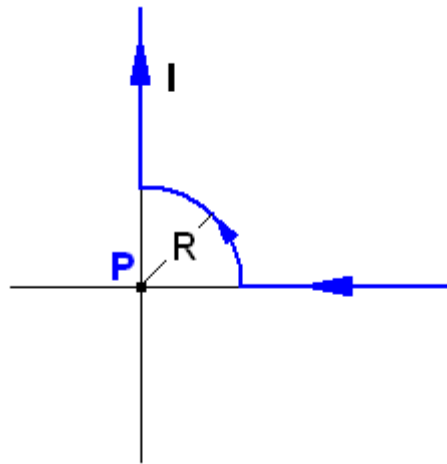


$$d\vec{B} = \frac{\mu_0 I d\vec{l} \times \vec{r}}{4\pi r^3}$$

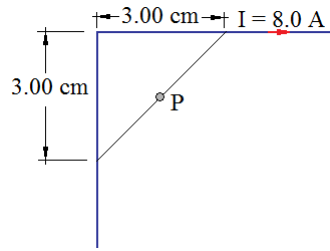
Problem 1.- Use the results of Biot and Savart law to find the magnetic field produced at the origin by the sets of coils shown in the figures:



Problem 2.- Calculate the magnetic field at point "P" due to the wire shown in the figure, which transports a current I.



Problem 3.- Calculate the magnetic field at P (in the middle of the segment shown) produced by the long wire that carries 8.0 A.



Problem 4.- In an ID circuit you have a conductor in the shape of a right triangle as shown in the figure. Find the magnetic field in direction and magnitude at point P if the circulating current is 2.4mA.

