Chapter 28 - Sources of Magnetic Fields

1) $\vec{B} = \dfrac{\mu_0 I}{4R}$

2) $r = \dfrac{\mu_0 I_0 v_0}{2\pi E_0}$

3) $B = \dfrac{\mu_0 \sigma v}{2}$

4) $r < a$

$B = \dfrac{\mu_0 I r}{2\pi a^2}$

$a < r < b$

$B = \dfrac{\mu_0 I}{2\pi r}$

$b < r < c$

$B = \dfrac{\mu_0 I}{2\pi r}\dfrac{c^2 - r^2}{c^2 - b^2}$

$c < r$

$B = 0$

5) $x = \dfrac{I_1}{I_1 + I_2} d$

$x = \dfrac{I_1}{I_2 - I_1} d$