

$$l^2 = \frac{d^2}{4} + d^2 \rightarrow \underline{l}$$

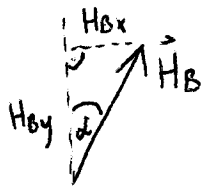
$$\cos \alpha = \frac{d}{l} \quad \sin \alpha = \frac{d}{2l}$$

$$H_A = \frac{I}{2\pi d/2} = \frac{I}{\pi d} = H_{Ax}$$

$$H_B = \frac{I}{2\pi l}$$

$$H_{Bx} = H_B \sin \alpha = \frac{I}{2\pi l} \frac{d}{2l}$$

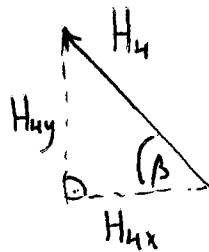
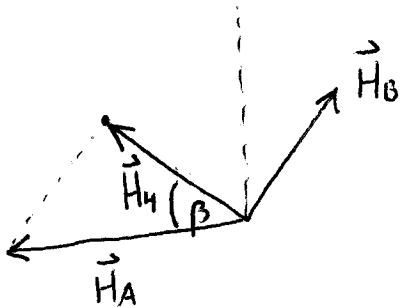
$$H_{By} = H_B \cos \alpha = \frac{I}{2\pi l} \frac{d}{l}$$



$$H_{4x} = H_{Ax} + H_{Bx} = \frac{I}{\pi d} - \frac{I}{2\pi l} \frac{d}{2l} = \dots$$

$$H_{4y} = H_{Ay} + H_{By} = 0 + \frac{I}{2\pi l} \frac{d}{l} = \dots$$

$$H_4 = \sqrt{H_{4x}^2 + H_{4y}^2} = \dots$$



$$\tan \beta = \frac{H_{4y}}{H_{4x}} \rightarrow \underline{\underline{\beta}}$$