5.5 g

$$\frac{1}{\mu} = \frac{1}{2i\hat{\sigma}_x}$$

as $\hat{\sigma}_x \to 0$, $\frac{1}{\mu}$ becomes dominant term

$$\Downarrow$$

$$\mu \tilde{\sim} 2i\hat{\sigma}_x$$

$$\hat{\mu z} = 2\rho K_{uz} \cdot \mu \qquad \rho \propto \hat{\sigma}_x^{-2/3} \qquad \hat{\sigma}_x = \sigma_x \sqrt{2K_i K_u \rho}$$

$$\propto 2(\sigma_x^{-2/3})\, K_{uz}(2i)(\sigma_x)(2K_i K_u \rho)^{1/2}$$

$$\propto 2(\sigma_x)^{1/3} K_{uz}(2i)(2K_i K_u)^{1/2} \sigma_x^{-1/3}$$

$$\hat{\mu z} \propto 4 K_{uz} i \sqrt{2K_i K_u}$$

↖ Doesn't scale by $\sigma_x$ at all!