

$$f_w = \frac{k}{r_w^\alpha}$$

$$\log(f_w) = \log\left(\frac{k}{r_w^\alpha}\right) = \log(k) - \alpha \log(r_w)$$

$\underset{y}{} \quad \quad \quad \underset{a}{\log(k)} \quad + \quad \underset{b}{} \quad \underset{x}{}$