1) $\sigma_y = \sigma_0 + k d^{-0.5}$

2) $$\frac{\sigma_y - \sigma_0}{k} = \frac{1}{\sqrt{d}}$$

$$\Rightarrow \quad \frac{k}{\sigma_y - \sigma_0} = \sqrt{d}$$

$$d = \left(\frac{k}{\sigma_y - \sigma_0}\right)^2$$

If unspecified, $k = \frac{\Delta\sigma}{\Delta(d^{-0.5})} = \frac{\sigma_2 - \sigma_1}{(d^{-0.5})_1 - (d^{-0.5})_2}$