$$F_{\text{air}} = K\, v$$

$$F_{\text{air}} = K\, v^2$$

$$F_{\text{air}} = K\, v^{1.34}$$

$$F_{\text{air}} - mg = 0 \qquad \Rightarrow \qquad F_{\text{air}} = mg$$

$$y = mx + b$$

$$F_{\text{air}} = K\, v^p$$

$$\begin{aligned} \log(F_{\text{air}}) &= \log(K\, v^p) \\ &= \log(K) + \log(\, v^p) \\ &= \log(K) + p \log(\, v) \end{aligned}$$