



$$P(x) = \frac{k}{NV}$$

$$P(y=1) = \frac{N_1}{N}$$

$$P(z|y=1) = \frac{k_1}{\cancel{N_1}} \cdot \frac{\cancel{N_1}}{N} = \frac{k_1}{\frac{k}{\cancel{N_1}}}$$