

Equations for deriving unknown population N, two systems.  $\frac{A}{N} \times \frac{B}{N} = \frac{M}{N}$ 

 $\frac{AB}{N^2} = \frac{M}{N}$  $ABN = MN^2$ AB = MN

$$N^{2} - N$$

$$ABN = MN^{2}$$

$$AB = MN$$

$$\hat{N} = \frac{AB}{M}$$