# **Algebraic Method of Calculating Deviations** With Floterial Districts

Assume 3 regular districts A, B and C (can be single or multi-town districts) and 1 floterial district containing the 3 regular districts.

#### **Aggregate Method**

## Variables

 $P_A$  = population of district A

 $P_T$  = population total  $(P_A + P_B + P_C)$ 

 $S_A$  = seats assigned to district A

 $S_F$  = seats assigned to float district

 $S_T$  = seat total  $(S_A + S_B + S_C + S_F)$ 

Deviation = 
$$\frac{\frac{P_T}{3291} - S_T}{S_T} \times 100$$

#### **Component Method**

## Variables

 $\overline{P_A}$  = population of district A

 $P_T$  = population total  $(P_A + P_B + P_C)$ 

 $S_A$  = seats assigned to district A

 $S_F$  = seats assigned to float district

 $AS_A$  = adjusted seats of district A area

 $D_A$  = deviation of district A area

$$AS_A = S_A + \left(\frac{P_A}{P_T} \times S_F\right)$$

$$D_A = \frac{\frac{P_A}{3291} - AS_A}{AS_A} \times 100$$

$$D_{A} = \frac{\frac{P_{A}}{3291} - AS_{A}}{AS_{A}} \times 100$$