$$w_1 = \tfrac{1}{2}\alpha$$

G1G1

$$w_j = -\tfrac{1}{2}\alpha$$

G1G2

$$\left.\begin{array}{l}\end{array}\right\} N = 1000 \text{ offspring}$$

$$\frac{1}{N} \sum_{k=1}^{N} w_k = \tfrac{1}{2} \cdot \tfrac{1}{2}\alpha + \tfrac{1}{2}\left(-\tfrac{1}{2}\alpha\right) = 0$$

Other Mixed parent

s	d
G2G2	G1G2

Heterozygous

s	d
G1G2	G1G2

$$\left.\begin{array}{l}\end{array}\right\} \text{Exercise } 06$$

Parent-average of breeding values: $\tfrac{1}{2}(u_s + u_d)$