

Shouji Rating System V3.3

Formulas

$$A\mu 1500$$

$$B\mu 1500$$

$$A\phi 0.64$$

$$B\phi 0.64$$

$$A\sigma 0$$

$$B\sigma 0$$

$$\beta 400$$

$$\alpha 0.5$$

$$C = (A\phi * B\phi * AT * BT) ** 0.25 * \beta + \ln(\beta)$$

$$Af = A\mu ** \text{mean}(A\phi, AT)$$

$$Bf = B\mu ** \text{mean}(B\phi, BT)$$

$$AT = A\mu / (A\mu * A\phi + A\mu)$$

$$BT = B\mu / (B\mu * B\phi + B\mu)$$

$$A^{\circ} = 1 / (1 + 10 ** ((B\mu - A\mu) / C))$$

$$B^{\circ} = 1 / (1 + 10 ** ((A\mu - B\mu) / C))$$

$$A\emptyset, 1 = \text{Win}, 0.5 = \text{Draw}, 0 = \text{Loss}.$$

$$B\emptyset, 1 = \text{Win}, 0.5 = \text{Draw}, 0 = \text{Loss}.$$

$$A\mu' = A\mu + Af ** \alpha * (A\emptyset - A^{\circ}) + Af ** \alpha * A\sigma$$

$$B\mu' = B\mu + Bf ** \alpha * (B\emptyset - B^{\circ}) + Bf ** \alpha * B\sigma$$

$$A\phi' = (A\phi * AT) ** (1 - |A\sigma|)$$

$$B\phi' = (B\phi * BT) ** (1 - |B\sigma|)$$