

Shouji Rating System V3.2

Formulas

$$A\mu 1500$$

$$B\mu 1500$$

$$A\phi 0.64$$

$$B\phi 0.64$$

$$A\sigma 0$$

$$B\sigma 0$$

$$\beta 400$$

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

$$Af = (A\mu ** A\phi) ** AT$$

$$Bf = (B\mu ** B\phi) ** BT$$

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

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

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

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

$$A0, 1 = \text{Win}, 0.5 = \text{Draw}, 0 = \text{Loss.}$$

$$B0, 1 = \text{Win}, 0.5 = \text{Draw}, 0 = \text{Loss.}$$

$$A\mu' = A\mu + Af * (A0 - A^{\circ}) + Af * A\sigma$$

$$B\mu' = B\mu + Bf * (B0 - B^{\circ}) + Bf * B\sigma$$

$$A\phi' = (A\phi * AT) ** (1 - ((A\sigma) ** 2) ** 0.5)$$

$$B\phi' = (B\phi * BT) ** (1 - ((B\sigma) ** 2) ** 0.5)$$