

Equation 1

$$\begin{aligned}x &= \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \\&= \frac{-2 \pm \sqrt{2^2 - 4 * (1) * (-8)}}{2 * 1} \\&= \frac{-2 \pm \sqrt{4 + 32}}{2}\end{aligned}$$

Equation 2

$$\begin{aligned}\varphi_{\sigma}^{\lambda}A_t &= \sum_{\pi \in C_t} sgn(\pi)\varphi_{\sigma}^{\lambda}\varphi_{\pi}^{\lambda} \\&= \sum_{\tau \in C_{\sigma t}} sgn(\sigma^{-1}\tau\sigma)\varphi_{\sigma}^{\lambda}\varphi_{\sigma^{-1}\tau}^{\lambda} \textit{ sigma} \\&= A_{\sigma t}\varphi_{\sigma}^{\lambda}\end{aligned}$$