Equations Set 1

$$x = -b \pm \frac{\sqrt{b^2 - 4ac}}{2a}$$

where $a = 4, b = 6, c = 1$

$$x = \frac{(-6) \pm \sqrt{6^2 - 4 \cdot 4 \cdot 1}}{2 \cdot 4} = \frac{-6 \pm \sqrt{36 - 16}}{8} = \frac{-6 \pm 2\sqrt{5}}{8}$$

Equations Set 2

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