Generated by Knoty computer algebra system: https://github.com/vuphan314/Knotty

$$T2x = x^2 - 2$$

$$skeinP2Q2 = -2 + SCC(1, 1)^2$$

$$lhs = \left(-2 + SCC(1, 1)^2\right)SCC(1, 1)$$

$$rhs = SCC(1, 1)\left(-2 + SCC(1, 1)^2\right)$$