

$$S2 = x^2 - 1$$

$$S3 = x(x^2 - 1) - x$$

$$S4 = -x^2 + x(x(x^2 - 1) - x) + 1$$

$$S5 = -x(x^2 - 1) + x(-x^2 + x(x(x^2 - 1) - x) + 1) + x$$