

First identify the like terms. Then combine them by adding coefficients.

$$-x^5 + 2x^5 + 6x^4 - 6x^3 + x^0 - 1 = (-1 + 2)x^5 + 6x^4 - 6x^3 + (1 - 1) = x^5 + 6x^4 - 6x^3$$