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

$$(-1)(1)1+(-1)1x+1x+xx+(-1)(x^2)$$

$$(-1)(1)1+(-1)1x+1x+xx+(-1)(x^2)$$

$$-1+(-1)1x+1x+xx+(-1)(x^2)$$

$$-1+(-1)1x+1x+xx+(-1)(x^2)$$

$$-1+x+(-1)x+1x+xx+(-1)(x^2)$$

$$-1+x+(-1)x+1x+xx+(-1)(x^2)$$

$$-1+x+(-1)x+xx+(-1)(x^2)$$

$$-1+x+(-1)x+xx+(-1)(x^2)$$

$$-1+x+(-1)x+(-$$

Simplifying: $(x+1)(x+(-1)1)+(-1)(x^2)$

$$\begin{aligned} 1 + (-1)xy + xy + (-1)(x^2) + (-1)(y^2) + (-1)(z^0) + x^2 + y^2 \\ 1 + (-1)1 + (-1)xy + xy + (-1)(x^2) + (-1)(y^2) + x^2 + y^2 \\ -1 + 1 + (-1)xy + xy + (-1)(x^2) + (-1)(y^2) + x^2 + y^2 \\ -1 + 0 + 0 + 0 + 1 \\ -1 + 0 + 1 \end{aligned}$$