F O I L

first outer inner last

MULTIPLY (x-1)(x+5)

multiply the first term in each set of parenthesis

$(x-1)(x+5) = x \cdot x = x^2$

multiply the outer term in each set of parenthesis

$(x-1)(x+5) = x \cdot 5 = 5x$

multiply the inner term in each set of parenthesis

$(x-1)(x+5) = -1 \cdot x = -x$

multiply the last term in each set of parenthesis

$(x-1)(x+5) = -1 \cdot 5 = -5$

add all of the results together

$x^2 + 5x + -x + -5$

combine like terms

$x^2 + 4x - 5$