Problem 14: Let x and y be real numbers with $y \neq 0$. Evaluate $\dfrac{-y + xi}{x + yi}$. (Source: AoPS Precalculus)

We have $-y + xi = i(x + yi)$. Making this substitution, we get

$$\frac{-y + xi}{x + yi} = \frac{i(x + yi)}{x + yi} = \boxed{i}$$