

Incorrect. A binomial in the form $a^3 - b^3$ can be factored as $(a - b)(a^2 + ab + b^2)$. Since $64x^9 - 27y^6 = (4x^3)^3 - (3y^2)^3$, in this expression $a = 4x^3$ and $b = 3y^2$.