Incorrect. To simplify this expression, simplify each expression and then multiply them: $\left(a^{-3}bc^4\right)^{-4} \cdot \left(a^2b^8c^{-3}\right)^2 = a^{-3(-4)}b^{1(-4)}c^{4(-4)}a^{2(2)}b^{8(2)}c^{-3(2)}$. What does this simplify to? Remember to use the exponent rules: $\left(x^n\right)^m = x^{nm}$ and $x^nx^m = x^{n+m}$.