Incorrect. In this case, $\dfrac{\left(a^2b^{-3}c^7\right)^2}{\left(abc^5\right)^3}$ can be simplified to $\dfrac{a^{2(2)}b^{-3(2)}c^{7(2)}}{a^3b^3c^{5(3)}}$, which can then be simplified to $\dfrac{a^4b^{-6}c^{14}}{a^3b^3c^{15}}$. Remember that $\dfrac{x^n}{x^m} = x^{n-m}$. Does this help you simplify the expression?