Incorrect. Be sure to use the exponent rules:  $(x^n)^m = x^{nm}$  and  $x^n x^m = x^{n+m}$ . In this problem,  $a^3(a^5a^{-2})^2 = a^3(a^{5-2})^2 = a^3(a^3)^2 = a^3a^6$ . Does this help you simplify the expression?