Rhino Participation Bonus (+2)

In STAT 511 and STAT 516, the following integrals are needed, Both are functions of a. Use integration by parts to find the antiderivatives. Complete each box. Show correct work for credit.

$$(+1) \quad 1. \int axe^{-ax} dx = \boxed{ + C}$$

$$(+1) \quad 2. \int ax^2 e^{-ax} dx = \boxed{ + C}$$

(+1) 2.
$$\int ax^2 e^{-ax} dx =$$
 + C Hint: Use #1.