34.14

(a): ~~Partial~~ Partial
Linear
3
No

(b): $\frac{dy}{dx} = x e^{y}$

$\int \frac{dx}{e^{y}} = \int x\,dx$

$\frac{x^2}{2} + C$

$-e^{-y} = 11$

$-y = \frac{-x^2}{2} + C$

$y = \frac{x^2}{2} + C \; ; \; y(0) = 0 \Rightarrow C = 0$