Solution (#1619) (i) The integrating factor is $\exp\left(x^2/2\right)$. We find $y = 1 - e^{-x^2/2}$.

(ii) The integrating factor is $x^{-3/2}$. We find $y = \left(x^{3/2} - x^{-2}\right)/7$.

(iii) The integrating factor is $\cos x$. We find $y = \tan x + \sec x$.