Assignment 10.

1. $\tan y = \frac{1}{2}x + \frac{1}{4}\sin 2x + C$.

2. $y = e^{x\ln x - x}$. $y = \frac{1}{e}$.

3. $y = \dfrac{(1+x^2)^3}{4} - 1$.

4. (a) $P = \dfrac{KP_0 e^{rt}}{K - P_0 + P_0 e^{rt}}$.

   (b) $P \to K$.

5. (a) Omit

   (b) $V = 18 - 18e^{-\frac{t}{2}}$.

   (c) $t = 2\ln 2$.