

系級：\_\_\_\_\_ 學號：\_\_\_\_\_ 姓名：\_\_\_\_\_

1. 試解：(1)  $2x \frac{dy}{dx} = 10x^3 y^5 + y$  (2)  $\frac{dy}{dx} = 5y - \frac{5}{2} xy^3$

參考解答：

1. (1)  $y^{-4} = \frac{1}{x^2}(c - 4x^5)$  (2)  $y^{-2} = e^{-10x} [c + \frac{1}{2}(xe^{10x} - \frac{1}{10}e^{10x})]$