國立臺灣海洋大學河海工程學系 2001 **工程數學 (三) 期末作業小考**

1. Solve the Green's function in terms of closed-form solution for

$$\frac{d^2y(x)}{dx^2} + \pi^2 y(x) = \delta(x - s)$$

subject to $y(0) = y(1)$ and $y'(0) = y'(1)$.

2. Solve the particular solution for

$$\frac{d^2y(x)}{dx^2} + \pi^2 y(x) = cos(\pi x).$$