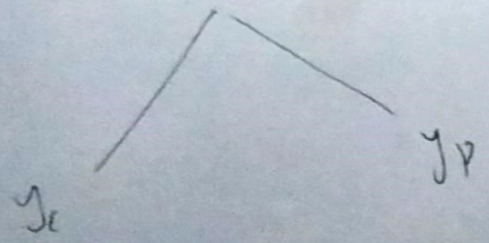
4.5

$$L(y) = g(x)$$



$$L(y) = 0$$

(d) $5e^{-x}\cos 2x - 9e^{-x}\sin 2x = f(x)$

$n = 1$

$\alpha = -1$

$\beta = 2$

$$\left[D^2 - 2(-1)D + (-1)^2 + (2)^2\right]^1 f(x)$$