

1. Ejercicios

$$\begin{aligned}y'' + y' &= 4x + 10\sin(x) \\(x^2 + x)t'' + 2y' - 2y &= 0 \\y'' + \frac{\cos(x)}{\sin(x)}y' + 2y &= 0 \\y'' - 2y' + y &= e^x \\(D^3 + 2D^2 - D - 2)y &= e^x + x^2 \\(D^4 - 2D^3)y &= x^3 + 3x^2 \\(x^2 + 1)y'' - 2xy + 2y &= 0 \\(D^2 - 2D + 3)y &= x^3 + \sin(x)\end{aligned}$$