Differenciálegyenlet – Laplace – Kezdetiérték–probléma

1. $y' + 2y = e^{-2x}$, $y(0) = 2$.

2. $y'' - 4y = x + 1$, $y(0) = 2$, $y'(0) = 1$.

3. $y'' - 4y = e^{-2x}$, $y(0) = 1$, $y'(0) = -2$.

4. $y'' + y' = e^{-x} + x + 2$, $y(0) = -1$, $y'(0) = 2$.

5. $y'' + 3y' + 2y = e^{-x}$, $y(0) = -2$, $y'(0) = 1$.

6. $y'' + 2y' + y = e^{-x} + 1$, $y(0) = -2$, $y'(0) = 1$.

7. $y'' + 4y = \sin 2x - 1$, $y(0) = -1$, $y'(0) = 2$.

8. $y'' - 4y' + 13y = e^{2x} \cos 3x$, $y(0) = 1$, $y'(0) = -1$.