

## Differenciálegyenlet – Elsőrendű– Lineáris

1.  $y' + 2xy = x$ .

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

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

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

5.  $(2y - 3x)dx + xdy = 0$ ,  $y(2) = 1$ .

6.  $(e^{-x^2} + 2xy - x)dx + dy = 0$ .

7.  $xu' + 1 = u + 4x^2 - u'$ .

8.  $\frac{y' - 1}{y - x} = 2 \operatorname{ctg} 2x$ .