9. Gyak.
Lineáris inhomogén, Bernoulli

1. Lineáris
   (a) $y' + \frac{1}{x}y = x^3,\ y(1) = 1$
   (b) $xy' - y = x^3 + 1,\ y(1) = 2$
   (c) $y' - \frac{4}{x}y = x^2 + x$
   (d) $y' - 2y = 3 \cdot e^{2x}$
   (e) $y' + 2xy = 2x \cdot e^{-x^2}$
   (f) $y' - (\tan x)y + \sin x = 0$
   (g) $xy' + 2y = 3x,\ y(1) = 0$
   (h) $y' \cos(x) + y \sin x = 1,\ y(0) = 1$
   (i) $y' + 2y = \begin{cases} 3x^2 \cdot e^{5x} \\ x^2 - 1 \\ x \sin 2x \\ x^2 \cos 3x \end{cases}$
2. Bernoulli
   (a) $xy' + y = \frac{\ln x}{y^3}$
   (b) $5(1 + x^2)y' = 2xy + \frac{(1+x^2)^2}{y^4}$
   (c) $y' - x^3y^3 = xy$
   (d) $y' = 4y - xy^2,\ x = 0, y = 2$