Alıştırmalar (Lineer ve Bernoulli Dif. Denk)

1) $xy' + \frac{2x+1}{x+1} y = x-1$

2) $y' + (\tan x)y = -\cot^2 x$

3) $(x^2+1)y' + 2xy = x^2$

4) $xy' + (2x-3)y = 4x^4$

5) $y' = 2xy + 3x^2 e^{x^2}$

6) $y' = -(\cos x)y + 4\sin(2x)$

7) $(4-x^2)y' + 4y = (x+2)y^2$

8) $y' + y\tan x = (\sec x)y^3$

9) $x\frac{dy}{dx} + y\ln x = y^{5/3} e^{\ln^2 x/3}$ (Burada $e^{\ln^2 x/3} = e^{\frac{\ln^2 x}{3}}$)

10) $y' + 3y = y^{1/3}$

11) $y' = y^5 + y$

12) $y' + \frac{2y}{x} = 2y^2$