

Readings: Riley, Hobson and Bence - Chapter 14
Boccio - 011_ODEs, 012_ODEs and 013_ODEs

Problems:

14.02(b) Separation of Variables
14.03(a),(b) Exact Equations
14.06 Integrating Factor
14.11 An ODE
14.13 ODE and Laplace Transform
14.17 An ODE
14.24(a),(b) Some 1st-Order ODEs
14.30 An ODE

Even # Answers:

14.02 (b) $y(x) = c \tan^{-1} x$

14.06 $3x^4 + 3y^2x^2 + 2x^3 = c$

14.24 (a) $y(x) = x \ln x - x$

14.24 (b) $y(x) = \tan x + \sqrt{2} \sec x$

14.30 (a) $x = \sin y$

14.30 (b) $x = -\cos y \cot y$