SOLVING DIFFERENTIAL EQUATIONS BY SERIES (§6.2)



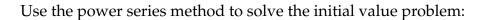
Team effort! Find at least the first *five* coefficients $(c_0, c_1, c_2, c_3, c_4)$.

Find the solution of the ODE IVP by an appropriate power series:

$$y' + (x - 1)y = 3, \quad y(1) = 2$$

SOLVING DIFFERENTIAL EQUATIONS BY SERIES (§6.2)

Team effort! Find at least the first *five* coefficients $(c_0, c_1, c_2, c_3, c_4)$.



$$(x+1)y'' + y = 0$$
, $y(0) = 0$, $y'(0) = 1$



SOLVING DIFFERENTIAL EQUATIONS BY SERIES (§6.2)

Team effort! Find at least the first *five* coefficients $(c_0, c_1, c_2, c_3, c_4)$.

Use the power series method to solve the initial value problem:

$$y'' + (x+1)y = 0$$
, $y(0) = 1$, $y'(0) = 0$