

MATH 323

Extra Problem for Homework 11

Find the first 4 nonzero term of the power series y if y satisfies:

$$y' + (2x + 3)y = 0$$

help: substitute $y = a_0 + a_1x + a_2x^2 + a_3x^3 + \dots$ in the equation and find a_1 , a_2 , and a_3 (a_0 will remain unspecified).