Problem 27

In each of Problems 23 through 28, plot several partial sums in a series solution of the given initial value problem about \( x = 0 \), thereby obtaining graphs analogous to those in Figures 5.2.1 through 5.2.4.

\[ y'' + x^2 y = 0, \quad y(0) = 1, \quad y'(0) = 0; \quad \text{see Problem 4} \]