## Math 226.01: Differential Equations and Linear Algebra Quiz 7

October 29, 1998

## Name:

Assume $y=\sum_{n=0}^{\infty} a_{n} x^{n}$ is a solution of the differential equation

$$
y^{\prime \prime}-x y^{\prime}-2 y=0 .
$$

Find the recurrence relation for the coefficients. Find also the first six terms (that is, up to the power $x^{5}$ ) in each of two linearly independent solutions.

## Answer:

Sign the pledge: "On my honor, I have neither given nor received unauthorized aid on this Exam."

## Signature:

