

Math 240 Fall 2011
Quiz 7
TA: Matti Åstrand

Name: _____

Show all work clearly and in order, and box your final answers. You have 10 minutes to take this quiz.

- 1.** (5 points) Solve the following Cauchy-Euler equation with initial conditions $y(1) = 1$, $y'(1) = 0$:

$$4x^2y'' + 4xy' + y = 0$$

- 2.** (10 points) Solve the equation $x^2y'' + 2xy' - 2y = 0$, with $\lim_{x \rightarrow \infty} y(x) = 0$ and $y(1) = 2$.