

Name: _____

You have 20 minutes to complete the quiz.

1. (5 points) Solve the given initial value problem:

$$y''' - 5y'' + 8y' - 4y = 0$$

given that

$$y(0) = -1, y'(0) = -3, y''(0) = -6$$

2. (5 points) Show that $\{x, x^2, x^3, x^4\}$ are linearly independent on $(-\infty, \infty)$.