Homework 6, due February 18th

WeBWorK

Go to http://webwork.ucr.edu/webwork2/MATH_046_001_15W/ and do all three problems in “2ND ORDER DIFFERENTIAL EQUATIONS PART 1”.

To hand in

1) What is the general solution of \( \frac{d^2 y}{dx^2} = 4y \)?

2) What is the solution of \( \frac{d^2 y}{dx^2} = 4y \) with \( y(0) = 1, \quad y'(0) = 0 \)?

3) What is the solution of \( \frac{d^2 y}{dx^2} = 4y \) with \( y(0) = 0, \quad y'(0) = 1 \)?

4) What is the general solution of \( \frac{d^2 y}{dx^2} - \frac{dy}{dx} - y = 0 \)?

5) What is the general solution of \( \frac{d^2 y}{dx^2} - \frac{dy}{dx} + y = 0 \)?