

Higher Order Equations

We can also consider higher order equations and attempt to analyze and solve them. Just like going from first to second order added a fair bit of complexity, so does stepping up to higher orders.

How can we solve them?

The process for solving these is similar to what we had for second order.

Example. Find the general solution to the differential equation

$$y''' + 2y'' - 4y' - 8y = 0.$$