Fundamental set of solutions

In this course, we are interested in sets of solutions that are linearly independent, and of a certain size.

Definition

Any set $y_1, \ldots, y_n$ of n-many linearly independent solutions of a homogeneous nth-order linear differential equation on an interval I is called a **fundamental set of solutions**.

Discussion, comments, and examples:

Math45-Module-09-Video-03

WeBWorK module 09 exercises:

- Problems 3

References:

- **Page 466 of this text.**   **(http://ramanujan.math.trinity.edu/wtrench/texts/TRENCH_DIFF_EQNS_I.PDF)**
  (Though again, it is phrased much differently than out use.)
- Also Zill.