

A *one-parameter family of curves* is a group of related curves that are set apart or distinguished from one another by a single parameter.

- The family of all circles centered at the origin
- The family of all lines through the origin
- The family of curves of the form $y = Cx^2$

The “solution” of a 1st order ODE is typically a one-parameter family of curves.

Two families of curves are called *orthogonal trajectories* of one another if at each point where a curve from one family intersects a curve from the other family, the tangents are perpendicular.

For example, the orthogonal trajectories of the family of circles centered at the origin are lines through the origin.