

# Goal and idea - Module 5

## **GOAL:**

We look at another common "type" of 1st-order ordinary differential equation. Our goal is to learn how to find solutions for those that are called *linear*.

To do so, we:

- Recall what first order linear equations are.
- Discuss how to solve such differential equations.
- Motivate the use of an "integrating factor."

## **IDEA:**

There are a few techniques for solving 1st-order linear DEs. Later in the course we will look at a technique called "variation of parameters." However, for now we focus on a technique which utilizes an "integrating factor."