

## HOMEWORK 1

Due on Monday, April 6th, in class.

**Exercise 1.** From Section 2.1: solve exercises 13, 15, 17, 19, 30, 38, 40.

**Exercise 2.** From Section 2.2: solve exercises 6, 7, 21.

**Exercise 3.** From Section 2.3: solve exercises 4, 9.

**Exercise 4.** Find two distinct solutions to the initial value problem

$$\frac{dy}{dt} = \sqrt{y}, \quad y(0) = 0.$$