Problem 50-2

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October 2020

1 Introduction

$$\frac{dS}{dt} = -0.0003 * I * S \mid S(0) = 1000$$

$$\{\frac{dI}{dt} = 0.0003 * I * S - (I + R) \mid I(0) = 1$$

$$\frac{dR}{dt} = 0.2 * I \mid R(0) = 0$$

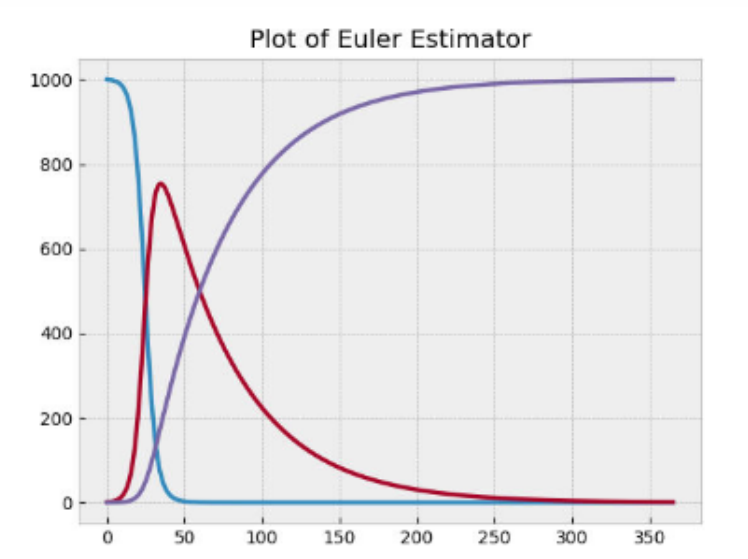

Figure 1: *graph backwards

The susceptble(purple) drops proportionaly to the rise in infected(red), and once the infected peaks, there's enough people infected that the dR becomes substatal enough to notice in the blue line.