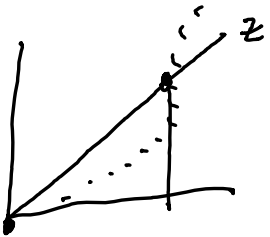
FINAL SIZE

3 Feb 2021

$$z = -\frac{1}{R_0}\log(1-z)$$

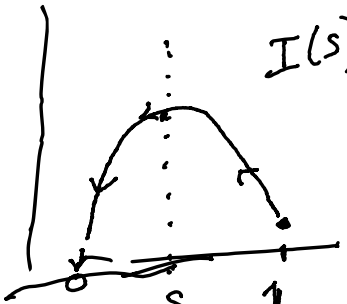
Lambert W



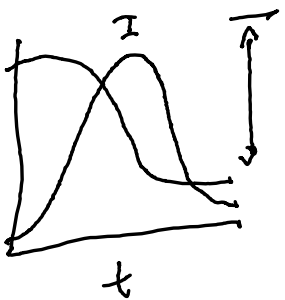
bisection
Newton's method
Brent's method

$$-\frac{1}{R_0}\log(1-z) - z = 0$$

SymPy



final size



prevalence
$I(t)$

incidence:
$\beta SI(t)$

logistics/ftw

{ final size/
herd immunity

data!

Euler-Lotka:
estimating R_0

most info for
today is in the
Python notebook