Exercise

Covid 19 situation in Togo
Graphycal representation
SIR Model  (population of Togo $N = 8 \times 10^6$)

\[ \frac{dS(t)}{dt} = -bS(t)I(t), \quad S(0) = N = 8 \times 10^6 \]

\[ \frac{dI(t)}{dt} = bS(t)I(t) - kI(t), \quad I(0) = 1 \]

\[ \frac{dR(t)}{dt} = kI(t), \quad R(0) = 0 \]
Plot of $S(t)/N$, $I(t)/N$, $R(t)/N$ on 60 days