Zachary_Levine_Math747_A1.R

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Importing libraries and loading data

Parameter estimates for epidemic wave one.

Parameter estimates for epidemic wave two.

```
##To check model fits.
i <- 1
while (i <= length(egfs)){
  #plot(egfs[[1, colnames(egfs[i])]])
  #plot(egfs[[2, colnames(egfs[i])]])
  i <- i+ 1
}
```

Province	Exponential.Growth.Rate	Doubling.Time	Reproduction.Number
ON	0.1742705891424971	3.97741916160720965	1.45557472858525
AB	0.1205228163744577	5.75116979017795060	1.31467828287654
QC	0.3333289299195437	2.07946901196740308	1.87498434121607
BC	0.0631514137400948	10.97595666524035707	1.16476787315206
SK	0.5382167748193190	1.28785874574912107	2.42070108134413
MB	0.1920390759493985	3.60940697685187040	1.50224620124093
NL	0.9515609832868346	0.72843169563942267	3.54076163130229
NB	0.3182534871980723	2.17797198912874546	1.83507580720128
NS	0.1128192093641559	6.14387553738846570	1.29451887401739
PEI	0.2884744937249260	2.40280231229348740	1.75634051152226
YT	177.8127212751975890	0.00389818667409726	548.87392352834377
NT	0.2199724660510253	3.15106337171835582	1.57570915337789

Province	Exponential.Growth.Rate	Doubling.Time	Reproduction.Number
ON	0.0462763176824101	14.97844286827113081	1.12077799176347
AB	0.0234813407269747	29.51906318380186178	1.06144148721598
QC	0.0623780227909744	11.11204154198100191	1.16275069801052
BC	0.0362419359148704	19.12555615649497298	1.09464534726642
SK	0.0624895704595297	11.09220587472032982	1.16304163266361
MB	0.0632043045925772	10.96677172588257143	1.16490582801750
NL	37.4299595585266545	0.01851851267635271	115.53913923064968
NB	0.6792832466033772	1.02040965094589331	2.80007722968919
NS	0.1107427763337269	6.25907353515432874	1.28908664293106
PEI	0.2186609313336410	3.16996354278906667	1.57225739413708
YT	177.8127212751975890	0.00389818667409726	548.87392352834377
NT	20.0050057849408063	0.03464868683425858	61.75163365156065