

11-7-05

①

Test 3 Fri Nov 18

Just Ch 7, 8

Lab H 2 weeks

P 328

Diagram $S \rightarrow A \rightarrow M \rightarrow R$

Change $\Delta S =$

Equations $\Delta A =$

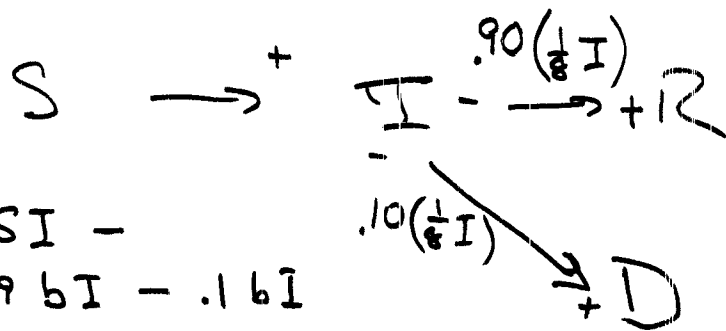
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Excel - parameters

- 1 col per group

- # tomorrow = # today + Δ

Add Death to Measles



$$\frac{\Delta I}{\Delta t} = + a S I - .9 b I - .1 b I$$

no change!

Survival rate
= 1 - death rate

$$\frac{\Delta R}{\Delta t} = + \cancel{b I} = \underline{\underline{.9 b I}}$$

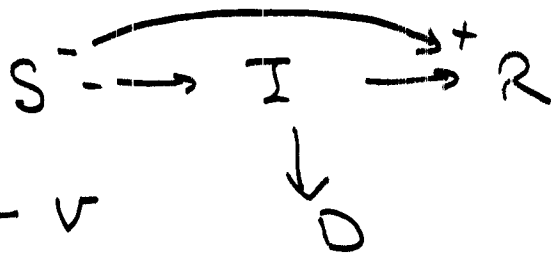
$$\frac{\Delta D}{\Delta t} = + \underline{\underline{.1 b I}}$$

Vaccination .

One Approach - Move people from S to R directly *

Another - New Group for ~~the~~ Vaccinated

Say ~~50~~ 5 people per day were vaccinated for the 1st 10 days.



$$\frac{\Delta S}{\Delta t} = -aSI - v$$

$$\frac{\Delta R}{\Delta t} = (1-d) \cdot bI + v$$

- Modify S, R formulas 1st 10 days

Add v as a parameter.

⇒ See the spreadsheet ←
linked to the calendar ←