PROBLEM 3: PATIENT NON-COMPLIANCE : 15.0 POINTS

A very common problem is that a patient may not consistently take the drugs they are prescribed. They can sometimes forget, refuse to take their prescription, or are unable to afford so skip doses to save money.

Review about how we've implemented the simulations in the past two problem sets, and spend some time thinking about what you would change to model this non-compliant behaviour.

Now that you've finished the above thought experiment, answer the following set of questions.

1. Which of the following approaches would be the **best** for modeling this?

   - (•) Make a subclass of `TreatedPatient` that stochastically does not take its medication.
   - ( ) Make a subclass of `ResistantVirus` that stochastically does not respond to medication.
   - ( ) Write a new type of simulation to model this behavior.

2. If we re-ran the simulations from the first problem of this pset, with 20% of patients not complying to their drug regimen...

   - (•) Fewer patients would be cured or in remission at the end of the simulations.
   - ( ) More patients would be cured or in remission at the end of the simulations.
   - ( ) Impossible to tell.

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