AP Statistics Chi-square Test for Goodness of Fit

The Pandemic of “Senior-itis”

Is getting “sick” random? Are students more likely to be out on certain days of the week? The following “random” data was taken from Sever’s AP classes for 2nd semester 2019. (it is not random, but for now I’m not going to worry about it.)

Day of Week # of absences Expected number of absences

Monday 29

Tuesday 20

Wednesday 18

Thursday 18

Friday 57

If the day of the week does not matter if you get “sick” then fill in the expected number of absences.

Is there convincing evidence that the actual absences are not random? (are not as expected)

We will do a test by hand and then (maybe) using software.

Ho and Ha:

Assumptions

Test Statistic

P-Value and conclusion