## BIOMETRY, CLASS EXERCISE 8

(1) (Test for independence). For devotees of Star Trek a question of fundamental interest is if fatality rates and uniform color are independent. The table below summarizes the fatality and survivor numbers in one the Star Trek episodes.

|  | Blue | Gold | Red |
| :--- | ---: | ---: | ---: |
| Dead | 7 | 9 | 24 |
| Alive | 129 | 46 | 215 |

Use a $\chi^{2}$ test for independence to test the hypothesis that fatality rates and uniform color are independent at the $5 \%$ level of significance. Make sure to report a $p$-value and draw a conclusion in the context of the problem.

