The first part was done in class. Second part is Homework.

1. The number of accidents involving one or more fatalities in a stretch of Interstate 80 were recorded for a year and the data is as follows. Is the data consistent with a Poisson distribution for the number of such accidents on any day with the same expected number of accidents on every day.

| no of accidents | no of days |
| :---: | :---: |
| 0 | 229 |
| 1 | 79 |
| 2 | 43 |
| 3 | 10 |
| 4 | 4 |
| $>4$ | 0 |

2. What if the same data were divided into two groups according to weather conditions: fair and bad. Does each group behave like a Poisson?

| no of accidents | no of fair - weather days | no of bad - weather days |
| :---: | :---: | :---: |
| 0 | 198 | 31 |
| 1 | 29 | 50 |
| 2 | 3 | 40 |
| 3 | 0 | 10 |
| 4 | 0 | 4 |
| $>4$ | 0 | 0 |

