Chisq_AK

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Question 9.1

Part 1

We do not reject the null for different numbers of years being encountered ($\chi^2_{(5)} = 0.71, p = 0.98$).

Part 2

We do reject the null for high counts ($\chi^2_{(5)} = 76.45, p < 0.0001$).

Question 9.2

Null: There is no difference in traffic depending on time on the east sidewalk. Null: There is no difference in traffic depending on time on the west sidewalk. Null: There is no difference in traffic between east and west sidewalks.

Part 1

Eastbound traffic is not equally likely at all times of day ($\chi^2_{(9)} = 98.54, p < 0.0001$). We reject H_0.

Part 2

Westbound traffic is not equally likely at all times of day ($\chi^2_{(9)} = 106.81, p < 0.0001$). We reject H_0.

Part 3: Method 1 (Table)

Traffic at a particular time of day is equally likely between traffic directions ($\chi^2_{(9)} = 3.24$, $p = 0.95$). We fail to reject H_0.

Part 2: Method 2 (putting each separately)

Traffic at a particular time of day is equally likely between traffic directions ($\chi^2_{(81)} = 90$, $p = 0.23$). We fail to reject H_0.

Question 9.3

Method 1: Table

We fail to reject the null. There is no difference between days with respect to traffic ($\chi^2_{(9)} = 3.93$, $p = 0.92$).

Method 2: Listing values

We fail to reject the null. There is no difference between days with respect to traffic ($\chi^2_{(72)} = 80$, $p = 0.24$).