

Solutions

Each answer shows the steps, then the **result**.

2.1

- when checking whether one categorical variable matches a claimed distribution

2.2

- when testing whether two categorical variables are associated in one sample

2.3

- a two-proportion test compares two groups on a two-category variable; homogeneity compares a variable with more than two categories across groups

3.1 B

3.2 B

3.3

(a)

- categorical (counts)

(b)

- a chi-square test of homogeneity

(c)

- $(r - 1)(c - 1)$