

Summarizing the Data—Computing the Sample Proportion

Use the data in your data table to determine the following quantities:

Sample size:

Number of red books in the sample:

Proportion of red books in the sample:

Looking at Sampling Variability

Some students in your class computed sample proportions using samples of size 50.

Record these different sample proportions here:

Some groups of students computed sample proportions using samples of size 100.

Record these different sample proportions here:

In the space below, construct a dot plot of the sample proportions for samples of size 50.

Then using the same scale, construct a separate dot plot for the sample proportions for samples of size 100.

Use the two dot plots to answer the following questions.

1. Considering just the sample proportions for samples of size 50, does it surprise you that the sample proportions are not all the same? Explain why or why not.

2. Is there more sample to sample variability in the sample proportions based on samples of size 50 or the sample proportions based on samples of size 100? Does this surprise you? Explain why or why not.