

**Solve each problem.**

- 1) A car company was trying to figure out if more men or more women purchased yellow cars. To do this they polled all the customer who bought a yellow car in the last month. Their results are shown below:

Sample #	1	2	3	4	5	6
Men	4	2	1	3	4	0
Women	3	0	2	4	0	2

Based on the information presented what can you infer about who bought yellow cars?

- 2) A carpenter has accumulated a large collection of nails, screws and bolts, which he had randomly thrown together into a bucket. Later he wanted to estimate how many of each he had. To do this he grabbed a handful from the bucket. His results are shown below.

Sample #	1	2	3	4	5	6	7	8
nails	19	19	21	22	22	18	18	20
screws	22	22	18	21	21	18	19	22
bolts	18	18	19	21	18	20	20	22

Based on the information presented can you infer anything about the relationship between the number of nails,screws and bolts in the bucket?

- 3) In a library there was a donation box for books. A librarian wanted to estimate how many fiction and how many non-fiction books were in the box so she pulled out a sample. The results are shown below:

Sample #	1	2	3	4	5
Fiction	20	22	22	24	23
Non-Fiction	32	32	32	28	29

Based on the information presented can you infer anything about the types of books donated?



Solve each problem.

- 1) A car company was trying to figure out if more men or more women purchased yellow cars. To do this they polled all the customer who bought a yellow car in the last month. Their results are shown below:

Sample #	1	2	3	4	5	6
Men	4	2	1	3	4	0
Women	3	0	2	4	0	2

Based on the information presented what can you infer about who bought yellow cars?

Based on the information presented and the small samples gathered it is impossible to make any meaningful assumptions.

- 2) A carpenter has accumulated a large collection of nails, screws and bolts, which he had randomly thrown together into a bucket. Later he wanted to estimate how many of each he had. To do this he grabbed a handful from the bucket. His results are shown below.

Sample #	1	2	3	4	5	6	7	8
nails	19	19	21	22	22	18	18	20
screws	22	22	18	21	21	18	19	22
bolts	18	18	19	21	18	20	20	22

Based on the information presented can you infer anything about the relationship between the number of nails,screws and bolts in the bucket?

Because of the very small discrepancy in the quantities it is unlikely any deduction can be made about the number of nails,screws or bolts in the bucket.

- 3) In a library there was a donation box for books. A librarian wanted to estimate how many fiction and how many non-fiction books were in the box so she pulled out a sample. The results are shown below:

Sample #	1	2	3	4	5
Fiction	20	22	22	24	23
Non-Fiction	32	32	32	28	29

Based on the information presented can you infer anything about the types of books donated?

Based on the information presented there will be 27% more Non-Fiction books donated.