

**Solve each problem.**

- 1) An animal control employee wanted to estimate how many people owned cats and how many owned dogs. To do this he polled the first few houses in several neighborhoods. His findings are shown below:

Sample #	1	2	3	4	5	6	7	8
Dog	42	39	40	40	40	39	41	39
Cat	41	41	39	41	39	38	42	39

Based on the information presented what can you infer about which type of pets there are?

- 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.

S #	1	2	3	4	5	6	7
nails	4	7	5	6	3	3	3
screws	3	4	4	5	7	5	5
bolts	4	3	4	6	5	7	7

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

- 3) For a canned food drive there were 3 types of cans vegetables donated: peas, carrots and green beans. To estimate how many of each type were donated, you pull out a sample. The results are shown below:

S #	1	2
peas	1	2
carrots	2	3
green beans	4	1

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



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Based on the information presented what can you infer about which type of pets there are?

Because of the very small discrepancy in the quantities it is unlikely any deduction can be made about how many cats or dogs are owned.

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

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