

**Solve each problem.**

- 1) 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:

Sample #	1	2	3	4	5	6
peas	28	29	29	29	32	32
carrots	32	28	31	29	31	28
green beans	29	29	31	32	30	32

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

- 2) During a class election a teacher wanted to predict who would win. To do this she took a sample of students from each class and asked who they would vote for. The results are shown below:

S #	1	2
Candidate A	2	1
Candidate B	1	3

Based on the information presented can you infer anything about who will win the election?

- 3) In a lake there are 3 types of fish: minnows, goldfish and sunfish. A fisherman wanted to estimate how many of each type there were. He scooped up several nets full and recorded his results (shown below).

S #	1	2	3	4	5	6
minnows	40	40	42	42	38	40
goldfish	24	26	20	21	22	22
sunfish	30	33	30	31	31	32

Based on the information presented can you infer anything about the number of different types of fish in the lake?



Solve each problem.

- 1) 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:

Sample #	1	2	3	4	5	6
peas	28	29	29	29	32	32
carrots	32	28	31	29	31	28
green beans	29	29	31	32	30	32

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

Because of the very small discrepancy in the quantities it is unlikely any deduction can be made about the types of cans donated.

- 2) During a class election a teacher wanted to predict who would win. To do this she took a sample of students from each class and asked who they would vote for. The results are shown below:

S #	1	2
Candidate A	2	1
Candidate B	1	3

Based on the information presented can you infer anything about who will win the election?

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

- 3) In a lake there are 3 types of fish: minnows, goldfish and sunfish. A fisherman wanted to estimate how many of each type there were. He scooped up several nets full and recorded his results (shown below).

S #	1	2	3	4	5	6
minnows	40	40	42	42	38	40
goldfish	24	26	20	21	22	22
sunfish	30	33	30	31	31	32

Based on the information presented can you infer anything about the number of different types of fish in the lake?

Based on the information presented there will be more minnows in the lake than goldfish or sunfish.

**Solve each problem.**

- 1) During a class election a teacher wanted to predict who would win. To do this she took a sample of students from each class and asked who they would vote for. The results are shown below:

Sample #	1	2	3	4	5	6	7	8
Candidate A	59	61	62	61	61	59	59	59
Candidate B	52	50	52	52	52	52	50	52

Based on the information presented can you infer anything about who will win the election?

- 2) 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	3	4	5
peas	31	31	29	31	30
carrots	29	31	31	32	32
green beans	31	29	32	30	32

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

- 3) A pizzeria owner was trying to determine which types of meat he should stock the most of for his new store. To do this he asked several pizza eaters what their favorite toppings were. His results are shown below:

S #	1	2	3	4	5
Pepperoni	1	1	2	3	4
Sausage	4	3	3	2	0
Ham	0	3	3	2	1

Based on the information presented what can you infer about which type of meat he should stock?



Solve each problem.

- 1) During a class election a teacher wanted to predict who would win. To do this she took a sample of students from each class and asked who they would vote for. The results are shown below:

Sample #	1	2	3	4	5	6	7	8
Candidate A	59	61	62	61	61	59	59	59
Candidate B	52	50	52	52	52	52	50	52

Based on the information presented can you infer anything about who will win the election?

Based on the information presented Candidate A will have 14% more votes.

- 2) 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	3	4	5
peas	31	31	29	31	30
carrots	29	31	31	32	32
green beans	31	29	32	30	32

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

Because of the very small discrepancy in the quantities it is unlikely any deduction can be made about the types of cans donated.

- 3) A pizzeria owner was trying to determine which types of meat he should stock the most of for his new store. To do this he asked several pizza eaters what their favorite toppings were. His results are shown below:

S #	1	2	3	4	5
Pepperoni	1	1	2	3	4
Sausage	4	3	3	2	0
Ham	0	3	3	2	1

Based on the information presented what can you infer about which type of meat he should stock?

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

**Solve each problem.**

- 1) A store manager was trying to figure out how many people did their shopping online compared to doing it in stores. To do this she polled several houses in the nearby neighborhoods. The results are shown below:

Sample #	1	2	3	4	5
Online	51	50	51	52	48
In-Store	43	41	44	41	44

Based on the information presented can you infer anything about the number of people who did their shopping online vs. in-store?

- 2) At the football game a vendor was trying to determine if Coke or Pepsi sold better. To do this he asked several rows of attendees which flavor they bought. His results are shown below:

S #	1	2	3	4	5
Coke	50	48	48	51	51
Pepsi	49	52	52	52	50

Based on the information presented what can you infer about the types of soda sold?

- 3) A dentists was trying to determine if more boys or girls had cavities. He checked the visits from the last month and his results are shown below:

S #	1	2
Boys	1	1
Girls	2	2

Based on the information presented what can you infer about who had cavities?



Solve each problem.

- 1) A store manager was trying to figure out how many people did their shopping online compared to doing it in stores. To do this she polled several houses in the nearby neighborhoods. The results are shown below:

Sample #	1	2	3	4	5
Online	51	50	51	52	48
In-Store	43	41	44	41	44

Based on the information presented can you infer anything about the number of people who did their shopping online vs. in-store?

Based on the information presented there will be 15% more people shopped Online.

- 2) At the football game a vendor was trying to determine if Coke or Pepsi sold better. To do this he asked several rows of attendees which flavor they bought. His results are shown below:

S #	1	2	3	4	5
Coke	50	48	48	51	51
Pepsi	49	52	52	52	50

Based on the information presented what can you infer about the types of soda sold?

Because of the very small discrepancy in the quantities it is unlikely any deduction can be made about which type of soda sold better.

- 3) A dentists was trying to determine if more boys or girls had cavities. He checked the visits from the last month and his results are shown below:

S #	1	2
Boys	1	1
Girls	2	2

Based on the information presented what can you infer about who had cavities?

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

**Solve each problem.**

- 1) A store manager was trying to figure out how many people did their shopping online compared to doing it in stores. To do this she polled several houses in the nearby neighborhoods. The results are shown below:

Sample #	1	2
Online	3	4
In-Store	2	3

Based on the information presented can you infer anything about the number of people who did their shopping online vs. in-store?

- 2) 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:

S #	1	2	3	4	5	6
Fiction	41	39	41	42	38	41
Non-Fiction	41	38	39	42	41	40

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

- 3) 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
nails	41	40	44	44	43
screws	34	30	34	32	35
bolts	48	51	48	51	51

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



Solve each problem.

- 1) A store manager was trying to figure out how many people did their shopping online compared to doing it in stores. To do this she polled several houses in the nearby neighborhoods. The results are shown below:

Sample #	1	2
Online	3	4
In-Store	2	3

Based on the information presented can you infer anything about the number of people who did their shopping online vs. in-store?

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

- 2) 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:

S #	1	2	3	4	5	6
Fiction	41	39	41	42	38	41
Non-Fiction	41	38	39	42	41	40

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

Because of the very small discrepancy in the quantities it is unlikely any deduction can be made about the types of books donated.

- 3) 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
nails	41	40	44	44	43
screws	34	30	34	32	35
bolts	48	51	48	51	51

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

Based on the information presented there will be more bolts in the bucket than nails or screws.

**Solve each problem.**

- 1) A dentist was trying to determine if more boys or girls had cavities. He checked the visits from the last month and his results are shown below:

Sample #	1	2	3	4	5	6	7	8
Boys	4	5	4	2	2	2	3	3
Girls	4	2	4	2	2	3	2	6

Based on the information presented what can you infer about who had cavities?

- 2) A pizzeria owner was trying to determine which types of meat he should stock the most of for his new store. To do this he asked several pizza eaters what their favorite toppings were. His results are shown below:

S #	1	2	3	4	5	6
Pepperoni	40	38	38	42	38	41
Sausage	30	30	34	34	32	31
Ham	25	26	24	26	20	26

Based on the information presented what can you infer about which type of meat he should stock?

- 3) An ad agency was trying to determine if customers liked blue, green or red packaging better. To do this they took a sample of customers and polled them. The results are shown below:

S #	1	2	3	4	5	6
Red	52	48	52	48	49	49
Green	49	52	52	49	48	50
Blue	51	48	50	51	50	50

Based on the information presented can you infer anything about which color is liked the best?



Solve each problem.

- 1) A dentist was trying to determine if more boys or girls had cavities. He checked the visits from the last month and his results are shown below:

Sample #	1	2	3	4	5	6	7	8
Boys	4	5	4	2	2	2	3	3
Girls	4	2	4	2	2	3	2	6

Based on the information presented what can you infer about who had cavities?

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

- 2) A pizzeria owner was trying to determine which types of meat he should stock the most of for his new store. To do this he asked several pizza eaters what their favorite toppings were. His results are shown below:

S #	1	2	3	4	5	6
Pepperoni	40	38	38	42	38	41
Sausage	30	30	34	34	32	31
Ham	25	26	24	26	20	26

Based on the information presented what can you infer about which type of meat he should stock?

Based on the information presented he should stock more Pepperoni than Sausage or Ham.

- 3) An ad agency was trying to determine if customers liked blue, green or red packaging better. To do this they took a sample of customers and polled them. The results are shown below:

S #	1	2	3	4	5	6
Red	52	48	52	48	49	49
Green	49	52	52	49	48	50
Blue	51	48	50	51	50	50

Based on the information presented can you infer anything about which color is liked the best?

Because of the very small discrepancy in the quantities it is unlikely any deduction can be made about the color customers liked.



Solve each problem.

- 1) 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
nails	29	30	28	31	28
screws	28	32	28	32	29
bolts	29	32	28	28	29

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

- 2) In order to determine which type of sweets he should keep the most of in his shop a baker logged every 5th customers order. His findings are shown below:

S #	1	2	3	4	5
Cookies	23	24	22	22	24
Brownies	32	29	32	28	31
Cupcakes	11	16	13	12	15

Based on the information presented what can you infer about which type he should stock?

- 3) A pizzeria owner was trying to determine which types of meat he should stock the most of for his new store. To do this he asked several pizza eaters what their favorite toppings were. His results are shown below:

S #	1	2	3	4	5	6	7
Pepperoni	4	5	3	5	6	3	6
Sausage	4	3	2	3	6	2	5
Ham	2	6	4	2	5	6	2

Based on the information presented what can you infer about which type of meat he should stock?



Solve each problem.

- 1) 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
nails	29	30	28	31	28
screws	28	32	28	32	29
bolts	29	32	28	28	29

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.

- 2) In order to determine which type of sweets he should keep the most of in his shop a baker logged every 5th customers order. His findings are shown below:

S #	1	2	3	4	5
Cookies	23	24	22	22	24
Brownies	32	29	32	28	31
Cupcakes	11	16	13	12	15

Based on the information presented what can you infer about which type he should stock?

Based on the information presented he should keep more Brownies than Cookies or Cupcakes.

- 3) A pizzeria owner was trying to determine which types of meat he should stock the most of for his new store. To do this he asked several pizza eaters what their favorite toppings were. His results are shown below:

S #	1	2	3	4	5	6	7
Pepperoni	4	5	3	5	6	3	6
Sausage	4	3	2	3	6	2	5
Ham	2	6	4	2	5	6	2

Based on the information presented what can you infer about which type of meat he should stock?

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

**Solve each problem.**

- 1) In order to determine which type of sweets he should keep the most of in his shop a baker logged every 5th customers order. His findings are shown below:

Sample #	1	2	3	4	5
Cookies	51	52	51	52	53
Brownies	41	42	44	41	43
Cupcakes	62	61	60	62	62

Based on the information presented what can you infer about which type he should stock?

- 2) At the football game a vendor was trying to determine if Coke or Pepsi sold better. To do this he asked several rows of attendees which flavor they bought. His results are shown below:

S #	1	2
Coke	4	5
Pepsi	5	2

Based on the information presented what can you infer about the types of soda sold?

- 3) A dentists was trying to determine if more boys or girls had cavities. He checked the visits from the last month and his results are shown below:

S #	1	2	3	4	5	6
Boys	51	49	51	50	48	51
Girls	40	41	44	44	43	40

Based on the information presented what can you infer about who had cavities?



Solve each problem.

- 1) In order to determine which type of sweets he should keep the most of in his shop a baker logged every 5th customers order. His findings are shown below:

Sample #	1	2	3	4	5
Cookies	51	52	51	52	53
Brownies	41	42	44	41	43
Cupcakes	62	61	60	62	62

Based on the information presented what can you infer about which type he should stock?

Based on the information presented he should keep more Cupcakes than Cookies or Brownies.

- 2) At the football game a vendor was trying to determine if Coke or Pepsi sold better. To do this he asked several rows of attendees which flavor they bought. His results are shown below:

S #	1	2
Coke	4	5
Pepsi	5	2

Based on the information presented what can you infer about the types of soda sold?

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

- 3) A dentists was trying to determine if more boys or girls had cavities. He checked the visits from the last month and his results are shown below:

S #	1	2	3	4	5	6
Boys	51	49	51	50	48	51
Girls	40	41	44	44	43	40

Based on the information presented what can you infer about who had cavities?

Based on the information presented more Boys had cavities.



Solve each problem.

- 1) In order to determine which type of sweets he should keep the most of in his shop a baker logged every 5th customers order. His findings are shown below:

Sample #	1	2	3	4	5	6
Cookies	3	6	3	3	5	2
Brownies	5	6	5	2	6	5
Cupcakes	5	5	2	2	3	4

Based on the information presented what can you infer about which type he should stock?

- 2) In a lake there are 3 types of fish: minnows, goldfish and sunfish. A fisherman wanted to estimate how many of each type there were. He scooped up several nets full and recorded his results (shown below).

S #	1	2	3	4	5	6	7	8
minnows	31	28	28	30	31	32	32	29
goldfish	15	11	14	11	14	14	15	16
sunfish	23	24	24	23	24	21	24	23

Based on the information presented can you infer anything about the number of different types of fish in the lake?

- 3) A pizzeria owner was trying to determine which types of meat he should stock the most of for his new store. To do this he asked several pizza eaters what their favorite toppings were. His results are shown below:

S #	1	2	3	4	5	6
Pepperoni	42	41	40	41	38	42
Sausage	39	39	39	41	42	42
Ham	38	42	39	42	41	42

Based on the information presented what can you infer about which type of meat he should stock?



Solve each problem.

- 1) In order to determine which type of sweets he should keep the most of in his shop a baker logged every 5th customers order. His findings are shown below:

Sample #	1	2	3	4	5	6
Cookies	3	6	3	3	5	2
Brownies	5	6	5	2	6	5
Cupcakes	5	5	2	2	3	4

Based on the information presented what can you infer about which type he should stock?

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

- 2) In a lake there are 3 types of fish: minnows, goldfish and sunfish. A fisherman wanted to estimate how many of each type there were. He scooped up several nets full and recorded his results (shown below).

S #	1	2	3	4	5	6	7	8
minnows	31	28	28	30	31	32	32	29
goldfish	15	11	14	11	14	14	15	16
sunfish	23	24	24	23	24	21	24	23

Based on the information presented can you infer anything about the number of different types of fish in the lake?

Based on the information presented there will be more minnows in the lake than goldfish or sunfish.

- 3) A pizzeria owner was trying to determine which types of meat he should stock the most of for his new store. To do this he asked several pizza eaters what their favorite toppings were. His results are shown below:

S #	1	2	3	4	5	6
Pepperoni	42	41	40	41	38	42
Sausage	39	39	39	41	42	42
Ham	38	42	39	42	41	42

Based on the information presented what can you infer about which type of meat he should stock?

Because of the very small discrepancy in the quantities it is unlikely any deduction can be made about which type of meat he should stock the most of.

**Solve each problem.**

- 1) A pizzeria owner was trying to determine which types of meat he should stock the most of for his new store. To do this he asked several pizza eaters what their favorite toppings were. His results are shown below:

Sample #	1	2	3	4	5	6	7	8
Pepperoni	31	28	29	30	28	29	32	31
Sausage	31	30	29	30	28	30	29	30
Ham	31	28	32	32	30	31	30	30

Based on the information presented what can you infer about which type of meat he should stock?

- 2) In a lake there are 3 types of fish: minnows, goldfish and sunfish. A fisherman wanted to estimate how many of each type there were. He scooped up several nets full and recorded his results (shown below).

S #	1	2	3	4	5	6
minnows	18	21	22	21	21	20
goldfish	18	22	20	18	22	19
sunfish	20	19	22	22	18	20

Based on the information presented can you infer anything about the number of different types of fish in the lake?

- 3) 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:

S #	1	2	3	4	5	6
Dog	2	1	4	0	3	2
Cat	2	3	1	1	4	3

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



Solve each problem.

- 1) A pizzeria owner was trying to determine which types of meat he should stock the most of for his new store. To do this he asked several pizza eaters what their favorite toppings were. His results are shown below:

Sample #	1	2	3	4	5	6	7	8
Pepperoni	31	28	29	30	28	29	32	31
Sausage	31	30	29	30	28	30	29	30
Ham	31	28	32	32	30	31	30	30

Based on the information presented what can you infer about which type of meat he should stock?

Because of the very small discrepancy in the quantities it is unlikely any deduction can be made about which type of meat he should stock the most of.

- 2) In a lake there are 3 types of fish: minnows, goldfish and sunfish. A fisherman wanted to estimate how many of each type there were. He scooped up several nets full and recorded his results (shown below).

S #	1	2	3	4	5	6
minnows	18	21	22	21	21	20
goldfish	18	22	20	18	22	19
sunfish	20	19	22	22	18	20

Based on the information presented can you infer anything about the number of different types of fish in the lake?

Because of the very small discrepancy in the quantities it is unlikely any deduction can be made about the types of fish.

- 3) 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:

S #	1	2	3	4	5	6
Dog	2	1	4	0	3	2
Cat	2	3	1	1	4	3

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

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

**Solve each problem.**

- 1) 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	6	7
Fiction	22	21	20	21	23	20	22
Non-Fiction	30	31	30	29	28	30	28

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

- 2) During a class election a teacher wanted to predict who would win. To do this she took a sample of students from each class and asked who they would vote for. The results are shown below:

S #	1	2	3	4	5	6	7	8
Candidate A	59	61	61	62	59	62	61	59
Candidate B	51	54	52	52	51	51	52	50

Based on the information presented can you infer anything about who will win the election?

- 3) In a lake there are 3 types of fish: minnows, goldfish and sunfish. A fisherman wanted to estimate how many of each type there were. He scooped up several nets full and recorded his results (shown below).

S #	1	2	3	4	5	6	7	8
minnows	2	1	4	5	5	4	3	1
goldfish	2	5	5	5	5	3	3	5
sunfish	3	3	1	3	4	3	1	3

Based on the information presented can you infer anything about the number of different types of fish in the lake?



Solve each problem.

- 1) 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	6	7
Fiction	22	21	20	21	23	20	22
Non-Fiction	30	31	30	29	28	30	28

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.

- 2) During a class election a teacher wanted to predict who would win. To do this she took a sample of students from each class and asked who they would vote for. The results are shown below:

S #	1	2	3	4	5	6	7	8
Candidate A	59	61	61	62	59	62	61	59
Candidate B	51	54	52	52	51	51	52	50

Based on the information presented can you infer anything about who will win the election?

Based on the information presented Candidate A will have 14% more votes.

- 3) In a lake there are 3 types of fish: minnows, goldfish and sunfish. A fisherman wanted to estimate how many of each type there were. He scooped up several nets full and recorded his results (shown below).

S #	1	2	3	4	5	6	7	8
minnows	2	1	4	5	5	4	3	1
goldfish	2	5	5	5	5	3	3	5
sunfish	3	3	1	3	4	3	1	3

Based on the information presented can you infer anything about the number of different types of fish in the lake?

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