## 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 \# | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pepperoni | 4 | 1 | 2 | 3 | 1 | 2 | 5 | 4 |
| Sausage | 4 | 3 | 2 | 3 | 1 | 3 | 2 | 3 |
| Ham | 4 | 1 | 5 | 5 | 3 | 4 | 3 | 3 |

Based on the information presented what can you infer about which type of meat he should stock?
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$\qquad$
$\qquad$
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 \# | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| minnows | 31 | 30 | 28 | 32 | 30 | 28 |
| goldfish | 14 | 16 | 13 | 15 | 12 | 13 |
| sunfish | 24 | 21 | 22 | 21 | 24 | 24 |

Based on the information presented can you infer anything about the number of different types of fish in the lake?
$\qquad$
$\qquad$
$\qquad$
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 \# | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dog | 20 | 19 | 22 | 18 | 21 | 20 |
| Cat | 20 | 21 | 19 | 19 | 22 | 21 |

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 \# | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pepperoni | 4 | 1 | 2 | 3 | 1 | 2 | 5 | 4 |
| Sausage | 4 | 3 | 2 | 3 | 1 | 3 | 2 | 3 |
| Ham | 4 | 1 | 5 | 5 | 3 | 4 | 3 | 3 |

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.
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 \# | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| minnows | 31 | 30 | 28 | 32 | 30 | 28 |
| goldfish | 14 | 16 | 13 | 15 | 12 | 13 |
| sunfish | 24 | 21 | 22 | 21 | 24 | 24 |

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) 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 \# | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dog | 20 | 19 | 22 | 18 | 21 | 20 |
| Cat | 20 | 21 | 19 | 19 | 22 | 21 |

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.

