## Solve each problem.

1) 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).

| Sample \# | $\mathbf{1}$ | $\mathbf{2}$ |
| :---: | :---: | :---: |
| minnows | 7 | 7 |
| goldfish | 3 | 7 |
| sunfish | 6 | 4 |

Based on the information presented can you infer anything about the number of different types of fish in the lake?
$\qquad$
$\qquad$
$\qquad$
2) 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 \# | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dog | 31 | 32 | 33 | 31 | 31 |
| Cat | 42 | 41 | 38 | 42 | 38 |

Based on the information presented what can you infer about which type of pets there are?
$\qquad$
$\qquad$
$\qquad$
3) 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 \# | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Men | 39 | 39 | 40 | 41 | 42 | 40 |
| Women | 40 | 40 | 40 | 41 | 40 | 42 |

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

## Solve each problem.

1) 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).

| Sample \# | $\mathbf{1}$ | $\mathbf{2}$ |
| :---: | :---: | :---: |
| minnows | 7 | 7 |
| goldfish | 3 | 7 |
| sunfish | 6 | 4 |

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.
2) 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 \# | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dog | 31 | 32 | 33 | 31 | 31 |
| Cat | 42 | 41 | 38 | 42 | 38 |

Based on the information presented what can you infer about which type of pets there are?
Based on the information presented $21 \%$ more Cats were owned.
3) 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 \# | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Men | 39 | 39 | 40 | 41 | 42 | 40 |
| Women | 40 | 40 | 40 | 41 | 40 | 42 |

Based on the information presented what can you infer about who bought yellow cars?
Because of the very small discrepancy in the quantities it is unlikely any deduction can be made about who bought more yellow cars.

