Making Predictions

Results from random samples can be used to make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ about an entire \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*Remember, percent is out of \_\_\_\_\_\_\_\_\_\_\_\_\_\_, so when looking for a percent you multiply your rate by \_\_\_\_\_\_\_\_\_\_\_.

**Example 1:**

The Student Council advisor asked every tenth student in the lunch line how they preferred to be contacted with school news. The results are shown in the table. What percent of the student population can be expected to prefer email?

|  |  |
| --- | --- |
| **Method** | **Number** |
| Email | 16 |
| Newsletter | 12 |
| Announcement | 5 |
| Telephone | 3 |

**Example 2:**

In a random survey of Californians, 58% voted in favor of a new law. If the population of California is 37,700,000 people, how many are in favor of the law?

**Example 3:**

A store sells 3 types of pants: jeans, capris, and cargos. The store workers survey 50 customers at random about their favorite type of pants. 25 customers reported liking jeans, 15 customers chose capris, and 10 customers reported liking cargos the best. If the store plans to order 450 pairs of pants, how many pairs of jeans should they order?

**Example 4:**

|  |  |  |  |
| --- | --- | --- | --- |
| Mystery | Science Fiction | Romance | Sports |
| 23 | 15 | 2 | 10 |

The librarian is trying to determine what types of books to sell at the upcoming school book fair. She conducted a random survey of students regarding their favorite genre of literature, and got the following results. What percent of the books she sells should be sports themed?

Table Challenge

|  |  |  |
| --- | --- | --- |
| 1. | 2. | 3. |
| 4. | 5. | 6. |
| 7. | 8. | 9. |