**Directions: Use the following two-way frequency table to answer questions 1-6.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Gender | Favorite Meal | | | | **Totals** |
| Pizza | Hamburger | Hot Dog | Spaghetti |  |
| Male | 18 | 17 | 9 | 12 |  |
| Female | 14 | 7 | 13 | 19 |  |
| **Totals** |  |  |  |  |  |

1. Complete the table by finding the marginal frequency for each food and each gender.
2. What is the **joint frequency** of males who prefer hot dogs? \_\_\_\_\_\_\_\_\_\_
3. What does the 19 in the table represent? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Which meal had the greatest **marginal frequency**? \_\_\_\_\_\_\_\_\_
5. How many total people were surveyed? \_\_\_\_\_\_\_\_\_\_
6. What is the **conditional relative frequency** for males who preferred spaghetti (with respect to the people who preferred it) ? \_\_\_\_\_\_\_

**Directions: Use the following two-way frequency table to answer questions 7-10.**

|  |  |  |  |
| --- | --- | --- | --- |
| Transportation | Gender | |  |
| Male | Female | **Totals** |
| Walk | 34 | 46 | 80 |
| Car | 28 | 17 | 45 |
| Bus | 15 | 12 | 27 |
| Cycle | 52 | 17 | 69 |
| **Totals** | 129 | 92 | 221 |

1. Identify one **joint frequency** from this table and describe its meaning. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Identify one **marginal frequency** from this table and describe its meaning. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Explain how you would calculate the **conditional relative frequency** for females who rode the bus (with respect to all the people who were surveyed). \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Write one conclusion that you can make from this two-way frequency table.

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