## Coordinate Algebra

Two - Way Frequency Table

Name Class Period

Jessica surveys students at her school about their favorite food. She recorded the responses in the table below.

| Food <br> Gender | Pizza | Chicken | Steak | French Fries | Totals |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Males | 14 | 10 | 6 | 7 |  |
| Females | 12 | 13 | 4 | 8 |  |
| Totals |  |  |  |  |  |

1. What is the joint frequency of female students who prefer Pizza?
2. What is the joint frequency of male students who prefer Steak?
3. What is the marginal frequency for each type of food?
4. What is the marginal frequency for each gender?
5. Given that the student is female, what is the frequency that she likes french fries?
6. Given that the student likes chicken, what is the frequency that the student is a male? Billy surveys $9^{\text {th }}$ and $10^{\text {th }}$ graders on which ice cream flavor they prefer. The results are in the table below.

| Flavor <br> Grade | Vanilla | Chocolate | Strawberry | Mint <br> Chocolate | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $9^{\text {th }}$ graders | 7 | 12 | 5 | 15 |  |
| $10^{\text {th }}$ graders | 5 | 11 | 8 | 13 |  |
| Totals |  |  |  |  |  |

1. What is the joint frequency of $9^{\text {th }}$ graders who prefer Chocolate?
2. What is the joint frequency of $10^{\text {th }}$ graders who prefer Mint Chocolate?
3. What is the marginal frequency of each Ice Cream Flavor?
4. What is the marginal frequency of each grade?
5. Given the student is a $9^{\text {th }}$ grader, what is the frequency he/she likes Strawberry?
6. Given the student likes Strawberry, what is the frequency that he/she is a $10^{\text {th }}$ grader?
