Lollipops, anyone?
Making a two-way frequency table
name
date $\qquad$

The Math Club is going to sell candy as a fundraiser. They surveyed 80 students about their favorite candy. The results are shown in the two-way frequency table. Fill in the missing information:

|  | Lollipop | Peanut <br> butter <br> cups | total |
| :---: | :---: | :---: | :---: |
| boys | 19 |  |  |
| girls |  |  | 43 |
| total |  | 35 |  |

1. How many of the students surveyed preferred lollipops? $\qquad$
2. How many of the girls preferred peanut butter cups? $\qquad$
3. How many boys answered the survey? $\qquad$
4. Were boys and girls both evenly represented in this survey? Why or why not?
$\qquad$
5. Explain what the number 19 means in this table.
6. Explain what the number 35 means in this table.
$\qquad$
7. What is the meaning of each marginal frequency in this table?
8. What is the meaning of each joint frequency in this table?

## What's for lunch?

Two-way frequency tables
Independent Practice
Name: $\qquad$
date: $\qquad$

A total of 247 students were surveyed about what they liked best for lunch. The results can be shown in a two-way frequency table. Fill in the table below:

|  | Pizza | Chicken <br> Sandwich | Salad | Total |
| :---: | :---: | :---: | :---: | :---: |
| Freshmen |  | 18 | 39 | 102 |
| Sophomores |  |  | 42 | 87 |
| Juniors |  | 28 |  |  |
| Total | 85 | 65 |  |  |

1. How many juniors preferred pizza? $\qquad$
2. What was preferred most by freshman? $\qquad$
3. What was preferred least by sophomores? $\qquad$
4. Overall, what was the most popular choice of all the students? $\qquad$
5. Were the different grade levels of students about equally represented? Why or why not?
$\qquad$
6. What is the meaning of the number 28 in the table? $\qquad$
7. What is the meaning of the number 85 in the table? $\qquad$
8. Explain the meaning of the marginal frequencies in this table. $\qquad$
9. Without naming each one, explain the meaning of the joint frequencies in this table.
10. How can you check your work to be sure you have filled in the table correctly?
