$\qquad$ Class $\qquad$ Date $\qquad$

## Practice 10-4

1. Forty people were surveyed at a sporting goods store about their favorite outdoor activities. Below are the results.

- 10 men and 3 women chose water skiing.
- 5 men and 7 women chose wakeboarding.
- 1 man and 2 women chose hiking.
- 8 men and 4 women chose fishing.
a. Construct a two-way frequency table for the data.

Favorite Outdoor Activity

|  | Water <br> Skiing | Wakeboarding | Hiking | Fishing | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Men |  |  |  |  |  |
| Women |  |  |  |  |  |
| Total |  |  |  |  |  |

b. According to the survey, what is the least popular activity?
2. The frequency table shows the uniform preferences of 45 band members.

| Favorite Color |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Black | White | Gray | Total |
|  | Ribbons | 3 | 6 | 1 | 10 |
|  | Ruffles | 2 | 8 | 6 | 16 |
|  | Sequins | 11 | 6 | 2 | 19 |
|  | Total | 16 | 20 | 9 | 45 |

a. Make a two-way table of relative frequencies. Find the relative frequencies for each column.

|  | Black | White | Gray |
| :--- | :--- | :--- | :--- |
| Ribbons |  |  |  |
| Ruffles |  |  |  |
| Sequins |  |  |  |
| Total |  |  |  |

b. Is there evidence that those who prefer black also prefer sequins to ruffles? Explain. $\qquad$
$\qquad$
$\qquad$

