

# Two-Way Frequency Tables

Algebra 1 • Section 10.6

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_ / 12

## Quick Review and Helpful Hints

Data questions are about choosing the right summary. Read the labels carefully, identify the total or condition being used, and connect each statistic to what it tells about the data.

**Q Example:** Find the mean of 6, 8, 10, 12.

**Work:** Add the values to get 36, then divide by 4 values.

**Answer:** 9

## Practice Problems

Solve each problem. Show enough work that another student could follow your thinking.

- In a table, 18 of 50 students play soccer. Find the relative frequency. \_\_\_\_\_
- If 12 of 30 girls choose art, find the conditional frequency. \_\_\_\_\_
- A table total is 80 and a cell is 20. Find the joint relative frequency. \_\_\_\_\_
- If 25 students prefer math and 15 prefer science, total? \_\_\_\_\_
- Out of 60 students, 36 are in band. Find percent. \_\_\_\_\_
- If 8 of 20 athletes also play music, find conditional percent. \_\_\_\_\_
- What does a marginal total show? \_\_\_\_\_
- What does a joint frequency show? \_\_\_\_\_
- If row total is 45 and cell count is 9, find row relative frequency. \_\_\_\_\_
- If column total is 32 and cell count is 24, find column relative frequency. \_\_\_\_\_

## Word Problems

- A survey has 100 students. 40 like algebra, and 25 like both algebra and geometry. Find percent who like both. \_\_\_\_\_
- In a club, 18 of 30 ninth graders prefer online practice. Find conditional percent. \_\_\_\_\_



## Answer Keys

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

### Step-by-Step Explanations

1. Divide 18 by 50.

2. Condition on girls, so use  $12/30 = 0.40$ .

3.  $20/80 = 0.25$ .

4. Add the category counts.

5.  $36/60 = 0.60 = 60\%$ .

6. Use  $8/20 = 0.40$ .

7. Margins summarize categories along the edge of the table.

8. It describes the overlap of two category choices.

9.  $9/45 = 0.20$ .

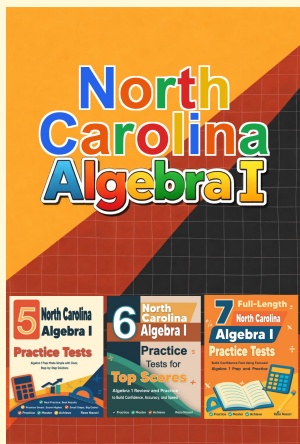
10.  $24/32 = 0.75$ .

11. 25 out of 100 is 25%.

12. Condition on ninth graders, so  $18/30 = 60\%$ .



## Want Even More Algebra 1 Practice?



### North Carolina Algebra I Preparation Bundle

18 full-length practice tests across three books  
Fresh test practice, detailed explanations, and organized review



**18 Tests**  
**3 Books**  
**One Bundle**

**Important:** These Algebra 1 resources are made for extra practice after the worksheet. Use the QR code for the state or program bundle connected with this worksheet.

#### Skill Review

- ✓ Strengthens equations, functions, systems, and modeling
- ✓ Supports steady review before tests
- ✓ Good for tutoring, homework, and independent practice

**Build the foundation.**

#### Test Practice

- ✓ Full-length practice tests for realistic pacing
- ✓ Detailed answer explanations for every test
- ✓ Useful after students finish topic worksheets

**Practice with purpose.**

#### Confidence

- ✓ Turns mistakes into targeted review
- ✓ Helps students see progress over time
- ✓ Keeps preparation organized and calm

**Move forward prepared.**