

Solve Two Way Tables with Fractions and Percentage

1. This two-way table shows information about the students in years 8, 9, 10.

	Year 8	Year 9	Year 10
Boys	60	45	75
Girls	50	55	65

(a) Find the total number of students in year 8.

Solve : There are 110 students in year 8.

(b) Find the total number of girls in years 8, 9 and 10.

Solve : There are 170 girls in years 8, 9, and 10.

(c) What fraction of the students are in year 10?

Solve : $\frac{2}{5}$ of the students are in year 10.

(d) What fraction of year 9 students are girls?

Solve : $\frac{11}{20}$ of the Year 9 students are girls.

2. A school conducted a survey to find out students' seating preferences in two different classrooms (Room A and Room B)

	Room A	Room B	Total
Front Row	45	38	51
Back Row	32	52	28

(a) Find the total number of students who prefer Room A.

(b) Find the total number of students who prefer the Room B.

(c) What fraction of students prefer Room B?

3. A group of people was asked about their favorite ice cream flavors (Vanilla, Chocolate, and Strawberry) and whether they prefer cones or cups:

	Vanilla	Chocolate	Strawberry
Cone	20	15	10
Cup	15	10	20

(a) Find the total number of people who prefer cones.

(b) Find the total number of people who prefer Strawberry ice cream.

(c) What fraction of people prefer Chocolate ice cream in cups?

4. A school has students in three different classes (Class X, Class Y, and Class Z) who took a math test. You have the following data:

	Class X	Class Y	Class Z
Above 90	15	10	20
Below 90	30	25	15

- Find the total number of students in Class Y.
- Find the total number of students who scored Below 90.
- What fraction of students in Class Z scored Above 90?

5. You conducted a survey to find out people's preferred restaurant type (Italian, Mexican, and Chinese) based on their age group (Adults and Seniors):

	Italian	Mexican	Chinese
Adults	25	20	15
Seniors	15	10	5

- Find the total number of seniors who prefer Chinese restaurants.
- Find the total number of people who prefer Italian restaurants.
- What fraction of adults prefer Mexican restaurants?

6. You surveyed people about their favorite TV show genres (Drama, Comedy, and Sci-Fi) and categorized them by gender (Male and Female):

	Drama	Comedy	Sci-Fi
Male	15	10	5
Female	10	15	20

- Find the total number of males who prefer Drama shows.
- Find the total number of people who prefer Sci-Fi shows.
- What fraction of females prefer Comedy shows?