Using Two-Way Tables Word Problems - Guided Lesson Explanation

Explanation#1

Students	Going to picnic	Not going to picnic	Total
Boys	14	25	14+25=39
Girls	16	5	16+5=21
Total	14 + 16 or 30	25 +5 or 30	60

We focus on the number of boys and total population of students going to the picnic.

Total boys going to the picnic = 14

Total population going to the picnic = 30

The proportion is 14:30 or 7:15

Explanation#2

Students	Going to picnic	Not going to picnic	Total
Boys	14	25	14 + 25 = 39
Girls	16	5	16+5=21
Total	14 + 16 or 30	25 +5 or 30	60

Note that the problem started with "Among all the students", this indicates that we are looking at the total population of all students (60).

5 girls are not going to the picnic.

The proportion would therefore be: 5:60 or 1:12.

Explanation#3

Create a table using the two categories

	Physics class	Not in physics class	Total
Math class			
Not in math class			
Total			

Use the values given to fill in the table

	Physics class	Not in physics class	Total
Math class		18	33
Not in math class	35		67
Total			

Use reasoning to complete the table. Remember, the totals are for each row and column. The column labeled "Total" should have the same sum as the row labeled "Total".

Class	Physics class	Not in physics class	Total
Math class	15	18	33
Not in math class	35	32	67
Total	50	50	100