Challenge Practice For use with the lesson "Analyze Data" 10.3

This table shows the number of students who like sports based on a survey about whether their parents like sports.

	Neither parent likes sports	1 parent likes sports	Both parents like sports	Total
Student likes sports	21	49	78	148
Student does not like sports	62	54	31	147
Total	83	103	109	295

- 1. Find the percent of students who like sports given that both of their parents like sports.
- 2. Find the percent of students who do not like sports given that neither of their parents like sports.
- **3.** Find the percent of students who like sports given that at least one of their parents does not like sports.
- **4.** Change the 78 and the 148 in the table so that 65% of the total students who like sports have parents who both like sports. Show your work.

Find the value of each variable and complete the table.

5.

	Fried	Grilled	Total
Chicken	2x + 6	3x - 15	136
Shrimp			
Total	115		245

6.

	Marigolds	Snapdragons	Petunias	Total
Tall	3x + y	x + 2y	x + y + 8	56
Short	x + 2y	4x + y	2x + 2y + 10	73
Total				

7.

	Opera	Symphony	Ballet	Total
Boys	2 <i>x</i>	3y + 6	$z^2 + 5z$	
Girls	x^2	$y^2 - 5y$	9z - 6	
Total	80	41	45	