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LEsSON
10.3

Challenge Practice
For use with the lesson "Analyze Data"
This table shows the number of students who like sports based on a survey about whether their parents like sports.

|  | Neither parent <br> likes sports | 1 parent likes <br> sports | Both parents <br> like sports | Total |
| :--- | :---: | :---: | :---: | :---: |
| Student likes <br> sports | 21 | 49 | 78 | 148 |
| Student does not <br> 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 | $2 x+6$ | $3 x-15$ | 136 |
| Shrimp |  |  |  |
| Total | 115 |  | 245 |

6. 

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

7. 

|  | Opera | Symphony | Ballet | Total |
| :--- | :---: | :---: | :---: | :---: |
| Boys | $2 x$ | $3 y+6$ | $z^{2}+5 z$ |  |
| Girls | $x^{2}$ | $y^{2}-5 y$ | $9 z-6$ |  |
| Total | 80 | 41 | 45 |  |

