

BOX 10.3 How to Calculate Gamma

1. Set up a work table where each cell gets its own row. (Double check to make sure you have the right number.) There will be six columns in the table. In the first column, identify the cell.
2. In the second column, place the number of cases in the cell.
3. In the third column, find the number of concordant cases by identifying all the cells that are down and to the right and then totaling the number of cases in all of them.
4. In the fifth column, find the number of discordant cases by identifying all the cells that are down and to the left and then totaling the number of cases in all of them.
5. In the fourth column, calculate the number of concordant pairs for each cell by multiplying the cell frequency (in column 2) by the concordant cases (column 3). At the bottom, total the number of concordant pairs in the column to find C.
6. In the sixth column, calculate the number of discordant pairs for each cell by multiplying the cell frequency (in column 2) by the discordant cases (column 5). At the bottom, total the number of discordant pairs in the column to find D.
7. Calculate gamma by substituting the values of C and D into the equation $\gamma = (C - D)/(C + D)$.