# Explanation of the Z Score

Colorado ASC runs audition tabulation based on a function called Z score. First, all students from a particular judge are listed and compared with the average and standard deviation of that judge.  The standard deviation shows the score spread for each judge. The judge's average score less the student's Raw Score is divided by the judge's standard deviation. The result will be a number roughly between -2 and +2. This number is the student's "Z Score." The average scoring student from that judge will receive a "z score" near zero.  The Z-score allows for the best mathematical method to account for the varying difficulty of a judge's scoring.  As a result, a student's raw score from one judge can produce a seemingly different z score than expected.  The score cut offs for the choirs are made by "z score."

The formula is:

(Student Raw Score - Judge's Average Score) / Standard Deviation of Judge = Z Score

Example:   ( 78 - 73 ) / 12.5 = .40000