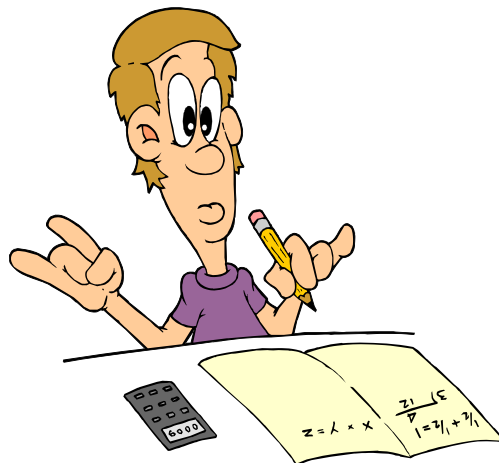## Computing Your SWE Final Multiple

Every SWE cycle most members are content to wait for their profile letters to get their final multiple score following the exam. The final multiple score is computed by adding together all points earned for: Exam Standard Score, Performance Factor, Medals and Awards, Time In Service, Time In Grade In Present Rating and Sea/Surf Time. The amount of points possible for each factor is described in [Enlisted Accessions, Evaluations, and Advancements, COMDTINST M1000.2](), article 3.A.3.b. However, there are those who can't handle the wait and expend much energy in chat rooms, on the phone and sending emails to their peers attempting to compute their final multiple so they can estimate where they will be on the eligibility list. Unfortunately for those anxious folks, all of the point totals can be accurately calculated ahead of time except one, the "Exam Standard Score". The standard score is the score you get on the exam by taking the raw score and converting it to a standard score based on how others in your same grade and rate did on the exam. The reason you cannot accurately calculate this score is because some of the numbers in the formula changes for every exam cycle based on the number of testers and what their individual raw scores were. That data is not public information and that data produces two factors needed for the calculation called the "mean" and the "standard deviation". What are these mysterious numbers you ask? The mean is the arithmetic average of everyone who took the test. Standard deviation according to Webster is; "The square root of the variance, or a statistic used as a measure of dispersion in a distribution, or the square root of the arithmetic average of the squares of the deviations from the mean." Well, that clears it up! If you're Albert Einstein, that is! In order for someone to accurately compute their standard score, they would need the mean and the standard deviation for their peer group which cannot be determined without having every raw score of every test taken in your rating. Looking at your raw score and standard score from a previous exam is a shot in the dark because the population (number who took the test) and their raw scores can and do change greatly from one cycle to the next. And of course, raw score data for other members fall under the Privacy Act and cannot be released. What we can provide to you mathematicians out there is the formula. But remember, without the mean and the standard deviation, you'll have to guesstimate. Are you ready? Here ya go and good luck! And remember, patience is a virtue! *Doug Rose, PPC (ADV)*

Raw Score – Mean / Standard Deviation (no round) x 10 + 50 = SC