

Procedure for calculating the final score

Your lowest of 7 exam scores is given half-credit:

Label your exam scores, except the lowest, as S1, S2, S3, S4, S5, S6 and call the lowest score S(low). (It doesn't matter which of the first six exams was your lowest--I just used 1,2,...6 for convenience.)

Then, since each exam is worth 100 points except the lowest which is weighted by 1/2 (50 points):

$(S1+...S6) + 0.5 S(\text{low}) = 650$ possible points at the end of the course.

So your final score will be

$$S(\text{final}) = [(S1+S2+S3+S4+S5+S6) + 0.5S(\text{low})] / 650.$$

For example, you might end up with 76.6, which means you will receive a C in the course.

To calculate the score you need to obtain a given final percentage average, solve the above equation for your exam 7 score, plugging in all your others and the desired S(final). In formula below, it doesn't matter which exams are labeled S1, S2, ...

$$S(\text{needed on exam 7}) = 650 S(\text{final}) - S1 - S2 - S3 - S4 - S5 - 0.5S(\text{low})$$