Oral Presentation Rubric.

Students are called to present their proofs of theorems or solutions to exercises in front of the class. I record a checkmark and use √, √+, √+ +, √-, √-- in my presentation grade sheets.

√+, √+ + (Outstanding) An outstanding presentation (converted to 95 – 100 % for the purposes of grades) is one where:

> 1. The mathematics is correct baring some minor errors (and these errors are corrected at the board after questions from me or the class).
>
> 2. The presentation is understood by the class – essentially this means that all their questions are adequately addressed (in practice this means that the attentive student can solve a similar problem to the one presented. (I will often ask the class, or someone in the class, to justify some particular step based on the presentation to make sure they understand.)
>
> 3. The student can adequately address my questions.
>
> 4. The student may receive a check plus if the problem is especially hard or challenging, or the student use a particularly imaginative way of approaching the problem.

√ : (Excellent) An excellent presentation is one where. (A/A-):

> 1. The problem uses known techniques or is a (more or less) routine application of the presented course material.
>
> 2. The presentation is understood by the class and student is able to justify their steps.
>
> 3. The student can adequately address my questions.
>
> 4. I may need to add some minor details.

√ (Intermediate) A medium good presentation (85%, 90% for harder problems) is one where:

> 1. The mathematics is for the most part correct but the student makes some errors; I have to explain some step to the class because the presenter does not adequately do so. But the underlying idea is correct and they are able to present that idea.
>
> 2. The class has many questions of understanding; I have to help a little to explain the proof or solution.
>
> 3. The student answers most of my questions with a little help (if a student in the class helps then that second student can receive presentation credits as well! If the presentation is such that in spite of the errors, that another student in the class can make the corrections, then the presentation is at the higher end of the B/C range).

√ - (Basic) A basic passing presentation (70 %) is one where:

      1. The student uses the correct techniques, but does not have a correct explanation of the steps needed toward the solution.

      2. He/she may have the "answer" but doesn't explain it well enough to the class and I have to redo the problem myself.

      3. The student cannot answer my questions well.

√ - - (Little/None). A failing presentation (0% - 65 %, I assign the passing percentage if the student clearly made an attempt to do the problem) is one where the student does not have the mathematics correct and does not indicate any understanding of the problem or is not prepared to present at all.

The Process. In my presentation grade sheets, I use check plus for excellent, check for medium/good, check minus for poor but with some indication that the student understood some of the mathematics, check double minus when there is no indication that the student has made any progress on the exercise. If a student makes a major mathematical mistake, I generally give them the opportunity to correct their work for the next class for full credit. So a student who makes a major mathematical mistake can correct it and still receive an A presentation grade. Also, I give students opportunities to get extra presentation points by volunteering to present an extra theorem or exercise.   These two factors, along with the policy of two passes on presentations, allows most of the conscientious students to get close to 100 % for their presentation grades, and even some over 100 % for doing extra problems. I feel that this encourages the students to work hard on their presentations. (In many cases the students are very proud of their solutions especially of a hard problem.)

In terms of time, 6 to 7 minutes for a presentation is probably closer to the minimum – some have gone as much at 15 minutes depending on the difficulty of the problem and the questions from the class (and from me). Depending on the size of the class I can get in from 6 to 10 presentations in a semester.   I use a (pseudo) random number generator to select the order for the roll that I use with which the students are called to present.