

	A more significant error is made	A minor error is made	Work is acceptable	Work is good
Modeling the problem: drawing a picture if helpful, making assumptions if needed, defining variables if non-standard ones are needed, choosing the equations, physical principles, etc to be used	Assumptions are invalid or missing, physical principles used to attack the problem are not applicable or complete (eg using mechanical energy conservation in a problem with friction), or presentation is not sufficiently clear to determine the above. A comment about the error should be made in the student's work explaining the error.	Like the prior box, but the missing, incorrect, or indecipherable piece is a small part of what's needed, or it has little impact on the development to follow. A comment about the error should be made in the student's work explaining the error.	The problem has been started correctly, and the presentation is sufficient to determine this, but the presentation could be more clear, neater, better organized, or more detail could be provided.	Work is complete, well organized, well explained, thoughtful, and easy to read. I can't think of a way it could be better.
	0 1 2	3 4	4 4.5 4.8	5
Solving the problem: coding things correctly, doing algebra correctly, combining the principles introduced, etc. Although I've listed this second, in practice it may be intertwined with the above, that's ok. The former is about conceptual parts of the problem, while this is about the technical parts of solving it.	Incorrect mathematical techniques are used, code contains bugs or logic errors, algebra errors are made, or work is not sufficiently clear to determine the above. Or the set-up of the problem is sufficiently flawed that such considerations are not relevant. A comment should be made in the student's work explaining the error	Like the prior box, but the error is a minor oversight or algebra error or one that does not significantly effect the problem. A comment should be made in the student's work explaining the error.	The problem has been solved correctly and work is clear enough to determine this. However, it could be presented in a clearer, neater, or more organized way. It could be easier to follow, or more complete.	Work is complete, well organized, well explained, thoughtful, and easy to read. I can't think of a way it could be better.
	0 1	2 3	3 3.5 3.8	4
Checking, interpreting, commenting on the result (if applicable): In some rare cases where results are not easily checked or interpreted, this point is a freebee.	The answer is unreasonable. A comment should be made in the student's work explaining the error.	A reasonable result has been generated (even if not correct), but there is no discussion, discussion is insufficient, or discussion does not make sense.	A reasonable result has been generated (even if not correct), and acceptable comments are made about its reasonableness.	A reasonable result has been generated (even if not correct), and high quality comments are made. I can't think of a way it could be better. OR there is not an easy way to check the result.
	0	0.5	0.8	1

Note that there is some overlap in points possible for columns since a minor error in otherwise nice work and very disorganized, but correct work may warrant similar credit.

Things might not always fit neatly into these boxes. Use your best judgment in applying this based on the intended "spirit".