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MS	RS	CR	AC	RE
4	4	4	4	4

MS 4 The interpretation and translation of the task are adequately developed, addressing all the key concepts (60 minutes per hour, 30 minutes rest time, and $20 \text{ min/lb} \times \text{lb} = \text{total cooking time}$).

RS 4 The strategy applied is effective and complete. The student multiplies 20 by 12 to get the cooking time and converts it to hours, adding the cooling time, then counts backwards to get the starting time.

CR 4 The work follows a clear and coherent path throughout and the solution is clearly identified: *9:45 is when you start to cook and You will put it in at 9:45.*

AC 4 The solution is correct and completely justified and supported by the work.

RE 4 The solution is stated within the context of the task and the review re-addresses all parts of the initial work. The student first uses a clock face to count backwards and in the review counts down one hour at a time.

2

MS	RS	CR	AC	RE
2	2	3	2	1

MS 2 The interpretation is underdeveloped. The student calculates a total of 240 minutes, but misinterprets its meaning, using inappropriate concepts. It is also inappropriate to count back by 5 minutes for each pound.

RS 2 Once the student has misinterpreted 240 minutes as 2 hours and 40 minutes, it is also not useful to count down in 5 minute increments from 60, stopping after five of these to give the final answer. It is not clear where the 12 comes from.

CR 3 The communication of the reasoning is only partially displayed. Even though the mathematics is complete and leads to a solution, it is not clear what the student is thinking leaving a significant gap in the reasoning.

AC 2 The solution is incorrect.

RE 1 No reflection is evident.

3

MS	RS	CR	AC	RE
4	3	4	3	3

MS 4 On the second page of the work, the translation and interpretation of the task are adequately developed. The errors are in the solution of the task, not in its interpretation.

RS 3 The strategy selected is only partially effective. It appears that the student means to subtract 4 hours and 30 minutes from the serving time of 2:15, but only completes the subtraction of 4 hours when arriving at the answer.

CR 4 The communication of the reasoning follows a clear and coherent path in spite of errors with arithmetic.

AC 3 The answer is incorrect due to not subtracting 4 hours and 30 minutes, as stated in both cases. The student appears to understand how to subtract time in one part of the work ($2:15 - 30 = 1:45$), but not in another. The solution is only partially correct.

RE 3 The student has reflected on the interpretation, concepts and strategies. There is, however, no evidence that she actually counted back from 2:15 or re-calculated the starting time, thereby not reviewing all of the calculations or the reasonableness of the answer.

Note: This student may benefit from an opportunity for revision.

4

MS	RS	CR	AC	RE
5	4	5	4	4

MS 5 The student shows a thorough understanding of the task and addresses it from two viewpoints, the second being unit analysis (even though it isn't expressed exactly right). The narrative and labeling enhance the work.

RS 4 The solution follows a clear and coherent path throughout the work.

CR 5 The work is enhanced with graphics and a thorough explanation throughout, enabling the reader to move easily from one thought to another. It is almost tutorial in nature. The second representation, what appears to be an attempt at unit analysis, isn't quite expressed successfully, yet the student seems to understand the approach.

AC 4 The solution is correct and completely justified and supported by the work.

RE 4 The student completely reviews the task and even converts 240 minutes to 4 hours a little differently, making it clear that the work was done twice. The attempt at unit analysis doesn't affect enough of the work to warrant a score of 5.