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Patterns in student responses to group exams YINEBEB ZENAW, CHRISTOPHER GARDNER, HUNTER CLOSE, STEVEN WOLF, Texas State University, Department of Physics — There have been recent national calls echoing the need to improve instruction in the scientific practices – scientific skills such as modeling, designing scientific experiments, and collaboration. Working together to solve a problem is one of the most fundamental skills a physicist will need to master to be effective after graduation. As our classrooms become more active and collaborative, we need to consider ways that our assessments can take on the same active and collaborative spirit that our classes have. One way that this is accomplished is through the use of group exams. Our research focuses on whether or not group reconstruction is possible given an individuals performance on exams vs. unrestricted group collaboration on the same exam. This preliminary study will explore the different patterns in student responses on individual and group exams. Of particular interest is student performance on coherent sets of problems: multiple questions that are testing closely related ideas in the same context.

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