Timed Agenda LAP 3 Day 1

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| Time | What Students Will Do | What Teacher Will Do | Rationale |
| 10:36 – 10:50 | * Find new seats * Do starter * Share answers | * Display new seating chart * Starter: Miss Cramer was talking with Miss Blackmer about exponent rules, and was having a hard time explaining why 1/x-1 = x1. Then she had a stroke of genius and realized that she could explain it using the zero power rule and the exponent subtraction rule! How did she explain it to Miss Blackmer? * Hand back worksheets from yesterday * Ask for volunteers to share answers | In the Exponent Rummy games that students will play today, they will need to understand that 1/x-n = xn. This wasn’t addressed in the jigsaw, and while students might have encountered it in their worksheets, they haven’t formally thought through a mathematical explanation of it. |
| 10:50 – 10:52 | * Receive the materials for Exponent Rummy | * Tell students that I know that a lot of them like to play cards and games, so we’re going to be doing that over the next two class periods, but with exponents. * Hand out Exponent Rummy instructions and decks of cards (one per group) | A lot of my students love to play cards and ask me frequently if they can play them in class. By having them play a card game that requires them to work with exponents, I am trying to match their interests with the curriculum. |
| 10:52 – 11:00 | * Follow along as the class reads the instructions * Watch the modeling of the game * Ask questions | * Explain to students that they have a deck that contains 11 different sets of equivalent exponential expressions * Tell students that in the starter today they worked with two equivalent expressions: 1/x-1 and x1. If it seems necessary, show another quick example on the board of an equivalent expression (what it is and how to determine if it’s equivalent). * Ask for a student volunteer to read aloud the instructions for the sorting game * Briefly model the sorting game * Ask if students have any questions | Students have never worked with the Exponent Rummy cards before, so they will need an introduction. By connecting the idea of equivalent exponential expressions back to the starter, the students can build on their previous knowledge and feel more capable of playing the games. By modeling the sorting game, students will understand the rules and expectations. |
| 11:00 – 11:10 | * Work in groups to sort the cards into 11 sets | * Tell students that it’s their turn now to sort their cards into 11 sets. They will have ten minutes to sort them * Tell them they can use scrap paper if they want to help them simplify * Circulate * For groups that are done early, they can use their phones to take pictures of their sets so that they can refer back to them when they need to share out (or they can write down their sets if they don’t have a phone). In the meantime, they can start trying to play Exponent Rummy (game 2). | Sorting the cards into sets provides a low stakes, non-competitive introduction to using the Exponent Rummy cards. Students will get a lot of practice simplifying expressions into equivalent expressions. |
| 11:10 – 11:25 | * Share their group’s sets on the Elmo * Check other groups’ work against their own   + Voice any agreements and disagreements | * Tell the class that we’re going to compare our sorted stacks * Have each group show one set on the Elmo until all sets have been shown. After each set, ask if the rest of the class agrees or disagrees. Facilitate discussion around any disagreements. * If this takes less time than anticipated, start explaining Exponent Rummy (game 2) | By comparing the sets that each group made, students will get to check each other’s work, positioning them as the teachers. In the case of disagreements, students will have to use their mathematical thinking to convince the other students of their answer. This is great practice for using evidence to back up claims and providing clear explanations. |
| 11:25 – 11:28 | * Gather all materials and put away in bag   + Count cards to make sure that they are all there | * Collect materials from groups | The materials need to be kept organized so that they can be used again. |