TEACHER 1 begins the lesson by showing a set of colorful animal counters with animals ranging from one to ten. "I'm going to get us started counting the animals! One, two...," Teacher 1 says, modeling 1:1 correspondence by pointing to one animal per number. "Now, count with me" Teacher 1 encourages, inviting the children to join in counting. After counting a few sets together, Teacher 1 distributes cards showing a set of animals to each student. "Now I want you to try counting yourself," Teacher 1 says, smiling. Each child takes a turn counting their animals aloud, with classmates cheering them on. Teacher 1 praises the students who count correctly. The room buzzes with excitement and anticipation as students wait their turn and proudly participate in the counting challenge.

TEACHER 2 displays and reads a problem: "If one packet of seeds has 4 sunflower seeds, how many seeds are in 6 packets?" Teacher 2 invites students to think about the problem on their own, jotting down their initial ideas on individual whiteboards. After a few minutes, students are encouraged to discuss their thoughts with a partner, with these instructions: "Share what you think with your partner, and then listen as your partner discusses their ideas." Teacher 2 moves around the room, listening in as ideas flow. Some students explain by drawing, others explain how they used an array to represent the seeds, and some reiterated their written words describing a solution strategy. A few students stop Teacher 2 to ask questions but are redirected back to their partner discussions for now. After a few more minutes of sharing, the class comes together. Teacher 2 asks a few select students to share their methods highlighting multiplication as repeated addition.

TEACHER 3 sketches a number line labeled with 0 and 1 on the board. Then, marks one-half and one-quarter. Students are invited to participate when Teacher 3 asks, " How would you decide where to put three-quarters?" She reminds students to use the sentence frames posted around the room to help formulate their thoughts. Examples are "One strategy I used was..." and "Some steps I took were...".
As answers are called out, Teacher 3 does her best to capture their thinking on the number line while also correcting their mistakes. For example, when one student said, "Three-fourths goes after one-half." Teacher 3 said, "Hmm. Do you think right after? Can you use where one-fourth is located to help decide a more precise location?" She points to the line as she talks and says, "What about here? Does that look right?" The students are engaged in thinking about the relative sizes of fractions.
Teacher 3 distributes individual fraction cards. "Now, let's see you label a number line with these fractions. One-third, two-thirds, and three-thirds." Independent work follows, with students labeling number lines. Teacher 3 circulates, offering feedback and praise. Students compare their findings with table partners and refine their understanding of fractions on a number line.

TEACHER 4 closes the door, stops the background music, and fires up the projector, ready and excited to begin class. The projector displays a picture of the local car wash, Sudzy Salmon. Teacher 4 explains, “Sudzy Salmon offers unlimited $5 car washes if you join the membership club by paying a $50 one-time fee.” Students are directed to take three minutes of quiet thinking time to consider how much it would cost for 1, 10, 20, and 50 car washes and then independently formulate a linear function to represent Sudzy Salmon. They follow up with group discussions. While circulating, Teacher 4 notices that some students are using graphs, some are using tables, and some are writing algebraic expressions. Students share and debate their findings, refining their thinking. The lesson culminates with students presenting their work and discussing how different approaches can lead to the same answer and, ultimately, the same mathematical understanding.

imagine learning

TEACHER 5 is known for her fun and silly demeanor, always starting class with a rambunctious “Hi friends, let’s MATH!” Teacher 5 energetically scribbles a quadratic equation. “First, we are going to revisit what we did yesterday. It was tough!” Teacher 5 writes yesterday’s cool-down on the board, showing how to solve it by completing the square, each step labeled with clear, thoughtful explanations. "Now, let's tackle this next one together." Teacher 5 navigates from desk to desk, offering probing questions encouraging deeper thinking, “I see that you two have slightly different equations, but you both got the same answer. How would you explain that to the class?”. These high schoolers LOVE stickers, and Teacher 5 is handing out the most popular *Scratch n Sniff* one to the table groups with the correct answer! As most of the class wraps up the second problem, Teacher 5 introduces a fresh set of equations. "Your turn to try these out on your own!" With markers in hand, students delve into their work time, applying the techniques Teacher 5 showed over the previous two days. A sense of accomplishment ripples through the classroom as some students solve the problem while others reproduce their partner’s work. Teacher 5 is visibly energized by the clear, structured approach they've mastered.

imagine learning

TEACHER 6 opens class by prompting students to take out their homework, saying, “Yesterday we were in Chapter 8, Section 2, pages 67-71. Let’s go over your homework! You should have completed p. 72 #1-11 odd.” The answers are displayed on the board. Teacher 6 has a “speed dating” activity for going over homework. Students pair up and have 30 seconds to discuss the first homework problem. When the timer goes off, they rotate to a new partner and continue this for 5 rounds. When time is up, students can ask the teacher to work out one homework problem. Teacher 6 works out #3, then poses this bell-ringer: "Construct a polynomial with roots at $x = 1$, $x = -2$, and $x = 3$." Mimicking the process from their homework, most students immediately begin sketching graphs to predict the position of the zeros. Teacher 6 notices that many students have different equations that all meet the criteria. This prompts a follow-up question for the class to consider as the second part of this activity. Teacher 6 asks, “What parts of a polynomial function can vary without changing the location of the zeros?” The students discuss, moving freely from group to group and making notes on their handouts. This work reinforces their understanding of polynomial functions through group discussions. Teacher 6 brings everyone back to focus by asking for table groups to share their findings.

imagine learning