

STUDENT: Number one means one pound.

STUDENT: So that'd be two. And then since the next one is one and one-eighth, so it'd be three, but then it'd be three and three-eighths plus 2.

STUDENT: Wait. So, we're going to take these and multiply them by how many are up here, and then we're gonna add them all together?

STUDENT: So, we're adding all of them. So, this is one, two, three, four, five, six, seven, eight.

STUDENT: So, nine-eighths would be multiplied by 3. It's twenty-seven-eighths.

STUDENT: It's 16, (inaudible)?

STUDENT: Mhm, yeah. (background noise)

STUDENT: You guys are on one, right?

STUDENT: Yeah.

STUDENT: Yeah.

MALLORY WILLIAMSON: So, adding something four times is the same thing as multiplying it four times.

STUDENT: So, like repeated addition?

MALLORY WILLIAMSON: Repeated addition, okay. (laughs) (inaudible) I didn't want to tell you. Okay, you guys, show me how do you do that. How you solve that.

(Inaudible speech by kids)

MALLORY WILLIAMSON: Okay, so let's try that strategy first. And not just any whole number, it's four, it's a value of four. So, if we just put—What happens if we put a four underneath the four?

STUDENT: You would...

STUDENT: That would equal one.

MALLORY WILLIAMSON: Just—That would equal just one and we wanted to make sure it stays as a four. Okay?

STUDENT: It would also change your denominator.

MALLORY WILLIAMSON: How did you get it? 'Cause I noticed she has twelve-fourths. How did you get three out of twelve-fourths?

STUDENT: It's twelve divided by four.

MALLORY WILLIAMSON: Okay. Now let's try the other strategy. What was the other strategy we can try to do?

STUDENT: Um, add three-fourths four times.

MALLORY WILLIAMSON: Okay. (background noise)

MALLORY WILLIAMSON: Isabella, can you read—restate what you're doing?

STUDENT: Um, candy.

MALLORY WILLIAMSON: Can you talk to him? He's not looking at you.

STUDENT: We have to find the overall value of three-fourths pounds of candy.

MALLORY WILLIAMSON: And what does three-fourths equal to on our (inaudible) plot?

STUDENT: Six-eighths. (background noise)

MALLORY WILLIAMSON: So, Izzy, what did you discover?

STUDENT: I discovered that you could take two of each since we're doing it by four and we could add them both together, and then we could add those two sums that we have together to make it.

MALLORY WILLIAMSON: And what was your sum?

STUDENT: Two-fourths, which is equivalent to what we got by—

MALLORY WILLIAMSON: No matter whether you're multiplying, or you're doing repeated addition, they both have the same amount of twelve-fourths, okay? The next thing I want you to try to do is see if you can draw a picture to justify that. So, we did it numerically, with numbers, but how can we draw a pic—a picture to reflect what you just did? Okay? And Dylan, if you're stuck, I need you to talk to your team, okay? You're a little bit behind. Okay, so right now we're going to try to take and draw a picture, so you can do three-fourths plus three-fourths plus three-fourths plus three-fourths, but we need to try to use a picture model.

STUDENT: I think that for our total we should do like a big—like, you know, how candy comes in either small packages or a small packet and then there's the big size that come with like multiple? We could do like that, like you have one big little bag, which is the total, right? So that we have like one with three-fourths—

STUDENT: And then four little bags and then split them into four with some kind of shading degree.

STUDENT: Yeah, we can, like, put them in there and then just, yeah. So, we do, like, our little packs. So, these would be, like, our total, then we would convert them and put them all in here like in the large bag, the larger bag. So, we would have three-fourths, another three-fourths, another three-fourths, another three-fourths, which as our model here would all equal to twelve-fourths, which would be our total, which is also our large bag totally.

MALLORY WILLIAMSON: So, how can we use this to reflect what we did here?

STUDENT: We could put three more lines to make it—

STUDENT: That'd be multiplying, we're adding.

MALLORY WILLIAMSON: Okay.

STUDENT: So, we'd have to draw another box and then shade this one and then the other one.

MALLORY WILLIAMSON: Okay, so you draw another box and shaded three more out of that, what would that equal?

STUDENT: That would equal six-fourths.

MALLORY WILLIAMSON: Okay, six-fourths. (background noise)

STUDENT: Ugh.

MALLORY WILLIAMSON: And what, what are you trying to get to? What's the total number that you're trying to get to?

STUDENT: Twelve-fourths.

MALLORY WILLIAMSON: Twelve-fourths.

STUDENT: Uh-huh.

MALLORY WILLIAMSON: And your math is going to look a little bit different than Tanner's and that's okay. Tanner's adding onto his model until he finds a solution and you're showing me

repeated addition, so three-fourths plus three-fourths, okay? So, just to let you know, they're the same, okay? All right?

STUDENT: And then we gotta add—