STUDENT: You two agree and me and Alvin don't.

STUDENT: Why do you have two 24s?

STUDENT: I don't know.

STUDENT: Alvin, why do you think it's 24?

STUDENT: This here is $24 for 1 time, for 3 times.

STUDENT: So she has…so she has $72?

STUDENT: What times.. why you say that?

STUDENT: I think it's 8 times 3, 'cause if she has, if she has $24, Wayne must have 8, 'cause,

STUDENT: It says, Maria saved $24.

STUDENT: 8 times 3.

STUDENT: Only they agree.

STUDENT: I don't agree? No? Why.

BECCA SHERMAN: Do you see that in his picture? Where does it show in his picture that Wayne has $8.

STUDENT: Thomas's picture divides by…

BECCA SHERMAN: How could you add it to… how could you add that to your math picture, to show this idea.

STUDENT: He's holding $8.

STUDENT: Arnold! Agree with me!

BECCA SHERMAN: And you show Wayne holding …

STUDENT: $24.

BECCA SHERMAN: $24.

STUDENT: $8.

BECCA SHERMAN: Oh, 8. How did you figure out that Wayne has 8 from your picture?

STUDENT: 'Cause he has … she has $24. Wait, how much does she have?

STUDENT: 3. $24.

STUDENT: 24 dollars.

STUDENT: Put together.

BECCA SHERMAN: I see three equal groups. What are the three equal groups of? 3 times what?

STUDENT: 24, 24 dollars is

BECCA SHERMAN:So she saved 3 times as much as Wayne. So Wayne has $24?

STUDENT: No. No, Maria!

STUDENT: Maria has $24. And Wayne has $8.

STUDENT: Wayne has $8.

BECCA SHERMAN: How do you know that Wayne has 8?

STUDENT: Because 8 times 3 equals 24.

BECCA SHERMAN:And did you show that in a picture?

00:02:16 Yeah. In a little tiny picture.

BECCA SHERMAN: In a little tiny picture? Do you have three $8 somewhere that maybe shows? I see 3 24's. What do the three 24s mean?STUDENT: Wayne had $8, right?

BECCA SHERMAN: In your story, what does that mean? Three 24s?

STUDENT: But I didn't put it in my picture.

BECCA SHERMAN: See if, see if you can.

STUDENT: See? Everybody agrees.

STUDENT: Except for Alvin. Why don't you agree?

STUDENT: I agree with whoever.

STUDENT: What was your answer?

STUDENT: 72.

STUDENT: How would, how is Wayne gonna have $72?

STUDENT: Cause he did 24, 24 times 3. 24, times, 3.

STUDENT: Oh yes, $24.

STUDENT: 3 times 2 equals 6, add 8.

STUDENT: 3? 82! Not 72.

STUDENT: Wait! 3 TIMES as much as. If she has 3

STUDENT: But we don't know how much it is.

STUDENT: Because, 3 times. 8, 16, 24. Get it? 3 groups of 8 equals 24. So the answer's 8.

STUDENT: Get it?

STUDENT: I counted, I counted how much, to go to 24, times 3, and I counted the boxes, and then it was 8.

VISITOR: 8 boxes of 3.

End 00:04:00

BECCA SHERMAN: You have a picture? You guys have a picture?

STUDENT: Yeah, we do.

BECCA SHERMAN: Of people? Okay. Mathematicians need all of our work! And you can just put it.

STUDENT: I have a question.

STUDENT: That equals 72. And 24 times 3 equals 62.

BECCA SHERMAN: How…You think it should equal the same thing?

STUDENT: Yeah.

BECCA SHERMAN: Could you try another strategy, like a break-apart strategy?

STUDENT: Like right here? Um, 4 times 3 equals 12. You put down the 2, put up the 1. So, um, 3 times 2 equals 5, plus 1 more, equals 6. So you put down the 6, and then it would equal 62.

BECCA SHERMAN: 3 times 2. 3 equal groups of 2. 2 equal groups of 3. What is that?

STUDENT: 6.

STUDENT: Because, I did this…

STUDENT: It's 72, because 3 times 2 equals 6.

STUDENT: Yeah, it's not 3 plus 2.

BECCA SHERMAN: Okay, you guys, we're gonna share out some ideas and see if we can get, understand each other's pictures…Can I borrow that one, too? Thanks. Can I borrow your picture too? And I think we got… and your cookie picture. Okay.