

JACOB DISSTON: Does that one go over there? I don't know. You gotta decide. And... I should say, you don't have to have decided already, these can change. You can decide after you hear us, after we start talking, you can change your mind about who you group with. And you might be grouped with more than one group. That's the whole point of this, like: What do we think is important when we look at all these things? There's a whole bunch of things up here.

JACOB DISSTON: Can I ask... so, one of the groups of people who think they're similar... So you three? Okay. I want you to come up and sort of separate your ones on the board. And just put them over here. So you keep the orange one, put the pink one over here. Keep the orange one, you keep the orange one. And then.. where's your pink one? Do you see your pink one?

STUDENT: Oh!

STUDENT: It's right here.

JACOB DISSTON: All right. Okay. So why are you guys saying that you are similar to each other?

STUDENT: Because other than everybody else's, we have the greater than and equal than... the greater than and equal sign.

JACOB DISSTON: Jasmine. Tell us what you see.

STUDENT: That one, right there? No, right there.

JACOB DISSTON: This?

STUDENT: Ain't nothing similar.

JACOB DISSTON: Similar?

STUDENT: No!

JACOB DISSTON: Oh, you were talking about someone's similar. So these are similar because of the greater than or equal to sign. Everybody agree?

STUDENT: Yes.

JACOB DISSTON: Are they different in some ways?

STUDENTS: Yeah.

JACOB DISSTON: How are they different, Maya?

STUDENT: 'Cause like they equal, like if you were to write it as an equation, they equal different things.

JACOB DISSTON: So the x values might be different, if we, if we ... worked it out?

STUDENT: Yeah, if we worked it out as an equation.

JACOB DISSTON: Okay. Any other ways in which they're different?

STUDENT: Um, numbers?

JACOB DISSTON: Tell me more.

STUDENT: Uh, well, like, one is 5, and one is 2. And one is 4, in the beginnings, and then? The other at the end, 34, 16, 18.

JACOB DISSTON: Okay. So, some of the numbers are different. So these are different in some ways but they're similar in important ways. Yeah. Zoe? What were you going to say.

STUDENT: Also? Two of them are... no wait. Yeah. Two of them are greater than or equal and one of them is less than.

JACOB DISSTON: Okay, so we've got greater than or equal to, and we've got less than or equal to. But, we can say they're similar in some way. Yeah? Okay. Does anybody else... so. Let me put these aside, and let me ask another group of people who have a similar thing going on. And I think what's important about this? Is that these are similar in a really important way, and they're different in a lot of ways. But we can still see the similarities. So we say these are grouped.

JACOB DISSTON: So, do you guys want to share? Why don't you pull yours out. Is there one more of you? Just two.

STUDENT: Just two.

JACOB DISSTON: Okay. So tell us what, um... let me see if anybody else... can you guys look at this? Can anybody tell us why they think they're similar? Why. Why, Derrick?

STUDENT: Oh yeah, I forgot, um. I forgot what I was gonna say.

JACOB DISSTON: Okay. Maria?

STUDENT: It's 'cause in both of the problems, they each have a number with a letter next to it.

JACOB DISSTON: Okay. So, a letter, a number next to it... a number next to a letter, and a number next to a letter. Okay. Maya?

STUDENT: Like, they have a number, and then they have an addition sign, then a number with a value... I mean, um, yeah. I think. I mean a variable, my bad.

JACOB DISSTON: Okay! Derrick, you got something?

STUDENT: Yeah. It's the same equation but with different numbers and different letters.

JACOB DISSTON: Tell us what you mean by 'same equation'.

STUDENT: Nevermind.

JACOB DISSTON: No, I like that! I like what you said! I just want everybody to sort of think... understand what you're thinking.

STUDENT: Um, um...um, yeah, I forgot.

JACOB DISSTON: Okay. All right. I'll leave that out there. They're the same equation with different numbers and different letters. I think that's... that's an interesting thing to notice about these. And whether they're the only two. Are they the only two that are the 'same equation' but different numbers and different letters? Srikar, you've got an idea about why these are pulled out? What's that?

STUDENT: The same order.

JACOB DISSTON: Tell me what you mean, 'same order.'

STUDENT: These.

JACOB DISSTON: You can point to it.

STUDENT: There's 3 right here and there's 105, then a plus sign, 2? 2. N? A. Equal? Equal. 8? 101.

JACOB DISSTON: Okay. So Derrick, did you hear him?

STUDENT: Um, no.

JACOB DISSTON: So he was saying they come in the same order. A number and a number, a plus sign and a plus sign. A... A number next to a variable, a number next to a variable. Equals sign, number number. Is that what you mean by 'same equation'? Okay. I mean, I think we could talk about each of these separately, but what we really want to do is we want to start tying these together and seeing similarities. So... if what you're saying can be applied to both of these, then I want you to think about how you might say that. Like, how does what you're saying for here apply to here. Now. I want ... I actually want to keep moving, and I see someone's trying to volunteer you to talk about another similar group. Does anybody else... anybody besides Zoe and Ronald-- were these two you? Anybody else see any others that you might call similar to this? Oliver?

STUDENT: Um....  $4p + 3p - 2p$ ?

JACOB DISSTON: This one?

STUDENT: Yeah.

JACOB DISSTON: Why would you call this similar?

STUDENT: Because they're right.. No! Oh, no! no!

JACOB DISSTON: Oh, you're gonna... do a whole new group? Okay. Does anybody see any others that we could call similar to this?

STUDENT: F?

JACOB DISSTON: Why?

STUDENT: No, actually it's no.

JACOB DISSTON: Just tell me why you think. It's fine if you disagree, I just want to know why you think. So is there any way that these could be considered similar?

STUDENT: Yes.

STUDENT: No.

JACOB DISSTON: What do you guys think? Is there?

STUDENT: No,

JACOB DISSTON: Turn and talk and say either yes, or why yes, no, why no. Why couldn't these be considered similar? Why could they be? Is there.... Malik? Do you have an idea why somebody might say these are all similar? Any idea? Did anybody hear from someone else why this might be considered, why these might be considered similar? You put it up here, so I know you have an idea. Anybody else? Say it loud. There's an equals sign! There's an equal sign, there's an equal sign. That distinguishes it from these, doesn't it? These have inequality signs. These have equal signs. So, if we think that's important? Then yes, these come together. Okay? If you don't think it's important, then you'd say, no, that doesn't fit. Okay, so.