

JACOB DISSTON: I want to very quickly...you know what? Here's what I want to do...you guys have all either talked about equations and inequalities or inequalities and expressions, so what I'm going to do is give you some index cards and the last part that I want you to do here on this activity is to make up six examples. So turn your papers to the back side. Number three says you have to make up six examples. You guys have to make up six examples, new examples. They can't be ones that are already on the board that fit, that are either equations, inequalities or expressions and fit the different subcategories that you came up with. Here we got properties and solving for unknowns. Here we didn't hear from it but people in groups came up with different categories. Can anybody name the categories they came up with within inequalities just so we can get some ideas?

STUDENT: The greater than and less than sign you can place them on a number line but they can't be a solution itself because they're not an equal to sign either. The greater than and less than equal to sign...

JACOB DISSTON: So these ones and these ones.

STUDENT: Yes, the ones that are like the alligator thing can't be a solution but the other ones can.

JACOB DISSTON: Okay, I heard what you guys were saying and that may or may not make sense to some people but what I want to show is that there are subcategories of inequalities; different types. So when you make up six you could make up some of these and some of these. What are the different types of expressions that people found? Does anybody have a name for the different categories of expression? Did anybody do expressions? I know you guys did. Give me a name for the different types of expressions.

STUDENT: We didn't really have names; we just sorted them into groups.

JACOB DISSTON: How would you describe the two groups?

STUDENT: One of them would be combining like terms I guess.

JACOB DISSTON: So like terms can be combined and what was the other group?

STUDENT: We didn't really make groups.

JACOB DISSTON: You said you sorted them into two groups.

STUDENT: Yes but we didn't name groups.

JACOB DISSTON: If this is the group that can be combined what is the other group?

STUDENT: Can't be combined.

JACOB DISSTON: Yes, it's the ones that you can't do anything to the expression. So, on your paper I want you and your group to make up six new examples. When you started that I'll give you the index cards.

STUDENT: Anyone?

JACOB DISSTON: Yes, six to fit any of those categories.

STUDENT: You have put them all together?

JACOB DISSTON: No, six.

STUDENT: You have to do six in each category.

JACOB DISSTON: No, six all together. Make up one of these, one of these...two, two, you decide. On here you got to make new examples that would fit within your groups that you listed here.

STUDENT: I'm looking at the ideas.

JACOB DISSTON: Good. Make up some new examples that'll fit within your subcategories and tell me what subcategories it is. Make up some new examples. Whatever variables you want, whatever numbers you want. Make up some new examples that would fit if I put them up on the board we could sort them.

STUDENT: We can do $17-2x=13$ (inaudible)

STUDENT: Combining like terms. $2y+3y=5y$.

STUDENT: No, we can do $2y$ plus 13 ...

STUDENT: Don't start.

STUDENT: $2y+11y= 15y$