Christina A-

I like that you constantly express your belief in your students even in writing! This will not be lost on them!

I notice that you don’t use essential questions, but instead use objectives i.e., “SWBAT solve and graph solutions to inequalities that have variables on both sides” Consider instead, “What the relationships and steps we need to remember in order to solve inequalities with the variable on both sides?” This change accomplishes two things: (1) SWBAT is too often just procedural; (2) you can question them as to what they are doing and why they are doing it even as you circulate, making your objectives threaded through the class rather than static. (I wish to acknowledge you are conscious of their need to pick up accountability as on Wednesday when your first worksheet question is a THINK one: what are the steps for solving inequlaties with the variable on both sides?

I see that you made intentional use of developing vocabulary.

I am thinking you could start this unit with an overview day , to which you return as you focus on each of the cases. Maybe this should be done with word problems and graphs as to possible values for x, with students finding values for x in the set braces showing the possible solutions. As you being each new subtopic, you could show them cases they’ve already done and what you are focusing on that day. Otherwise, students may lose track of how the cases interrelate.

I thought you made good use of Infinite Algebra’s structures!! Is it something you have told other students about?? One thing I couldn’t do was copy an example to illustrate my point to you…. Maybe you know a way around that. I hope my comments below are clear enough!

How do you feel about groupwork? I was never sure if during classwork, what the participation strcutue was and you thought it valuable for students to work alone, in pairs, stations, etc.

I was surprised that your test did not have varied components, like T-F or matchings or fix the error. Any one of those could be used to keep thinking high up here! What about translating a word problem or two? What about checking and substitution?

Tuesday (Part 1)

Good use of range of inequality comparison symbols, and sequencing of activities from “Let’s go teachers through “You go”

Nice use of real world examples for situating the concept

Suggestion: consider giving one of your prompts (“You go”) instead us as notation (p>4) as set braces:

{……8} You call this substitution, but I think it can be enlarged so as to reinforce concepts, including maxima and minima as well as “solution set” If student says let’s check “8” you can say, GREAT, then continue to ask for other solutions –is there a smaller, is there a larger…. And put ellipsis marks within set as appropriate

Make sure you note difference between discrete and continuous solutions sets

Note: Perhaps an introductory slide to the topic is necessary. The use of the real life situation is a good one. Consider however, that to this point the students have been using mainly discrete solutions, so it is also good to talk about inequalities as more expansive and sometimes infinite solutions

I noticed you did not use any technology; could the use of graphing calculators be helpful to students in inductive, if not analytical, ways?

**Wednesday**

I like that by this day your line graph is not marked with a zero, enabling the students to understand that it need not be the marked point on the graph

Note: you asked for a domain in your scatterplot in the warm-up

This would be a great time for you to take those x values and put them in braces AND in word notation: the set of all integer x such that \_\_\_\_ < x < \_\_\_\_\_\_\_\_\_\_\_

In these statements, which sometimes require students to combine like terms, simplify, etc. your solutions ( PPT slide 7) do not show students checking a value in the original statement: why or why not is that necessary? On the worksheet, would you want to ask students if particular values make the inequality true or false? (note: you do this occasionally, as in the Exit Slip on “Monday”, which I was glad to see that you anticipated—you may want to make more, if not consistent use of “checking” or True-False)

Consider an example where students test a number from a graph—and find that it is wrong. Could they find the error in the procedure?

I like that you realize the importance of grounding this work in real life examples, so you take the time to do that.

When you work with parentheses, two connections I think you can draw are : (1) explain the association with order of operations; (2) include examples where a second power appears on both sides—and where it then drops out—just to show the power and connections among the procedures.

Thursday

This day focuses on compound inequalities

With long processes such as these, consider posting a solution set of answers with a few more more than you need (i.w. with 3-4 addl sets as “dsitractors”)

Could this provide a safety net to students and encourage them to work toward certain solutions—and consult neighbors if they solutions not on the list? Every three minuts, might they go to the board and post processes and the class agree ro disagree?

In the hw for task 3 you have a FRACTION (or division as the operation). I think this is a good idea—but if you scrambled the answer key, again not numbering it, that might encourage students to hang in with the hw!!

**Note: would it be effective to present the graphed inequlaites FIRST and then describe the solution set as compound meaning that x < \_\_\_\_ OR x > \_\_\_\_? Might this allow more connection to \_\_\_ < x < \_\_\_\_ situations?**

Friday

Again, that you start with word problems to ground the material is really valuable, and insightful on your part.

Monday-Tuesday Review

I would like to see you incorporate on your review sheets some tasks where students show thinking, rather than just procedures. That would bring in more “discrimation” for the students, and clarification before they I am glad you categorized the review tasks putting the compound one in a separate section. Might it be good for students to first identify which day of the week they studied each kind—so as to be aware of similarities?? (you do something similar in your notebook check, but my suggestion might make the notebook an active resource)

I think that you continue to incorporate word problems is important—as you are doing, you can associate them with inequalities, without having to beat them to death!

\*\*On Tuesday, I was unsure what use you were making of the solved problems. One use you COULD make of such problems is for students to write in what they are doing and why.