Gamble, Kelsey
September 24, 2016
TE 855 - Gundlach
Math Problem Analysis – Reflection

1) Are there ideas or concepts that others thought of that you did not? Or vice versa?

Mayes-Henry, Janelle: Mayes-Henry described her steps in a lot of technical terms including the "addition property of equations," the "subtraction property of equality," and the "division property of equality." I thought this was interesting background knowledge that I chose not to use. I think it is important to be familiar with this properties but more to understand that the main reason we need to do the same thing to both sides of the equation is to maintain the balance or equality of the equation. The other thing that Mayes-Henry did that I agree with is show how to check the answer, I am disappointed that I did not include that step myself.

Williams, Denina: I see a lot of similarity between my own work and Williams' work that we both approached the idea of "balance" in our equations, and the viewed the "goal" of the exercise was the isolate the x. I also like that Williams discusses inverse operations. I do not like how Williams decided that when she hit fractions she automatically thought she had a made an error. Our students often get intimidated by fractions and think fractions are bad. Williams, instead of pushing through with the steps to get all the way to the end, decided to go back because "This is where it became obvious to [her] that [she] had made an error," even though she had not. To our students this would say, "I hit fractions, I must be doing something wrong." In my opinion, that sends the wrong message, at least for middle school students.

Gamble, Kelsey: One thing that I thought was interesting that neither of my classmates did was explain their reasoning to why they chose to subtract as they did. In my solution I explained that, in order to keep working with positive numbers, I was going to rearrange the equation by subtracting the smaller numbers from their larger counterparts.

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2) If Holt and Chazan were here with us, what do you think they would have to say about

the way you and your classmates solved the problem?

I think Chazan and Holt would say that all of our descriptions were very procedural based,

mainly explaining the *how* instead of the reasoning and the *why* that is so important to

mathematics. I think we all had good points in explaining why, for example: why we can

plug 4 in for x to check our answer (Mayes-Henry), properties of equality (Mayes-Henry),

balance of equations (Gamble and Williams), inverse operations (Gamble and Williams), and

explanations of why we ordered the steps we did (Gamble, Mayes-Henry, and Williams). I

think even still today the *why* of mathematics is shuffled to the bottom of the pile of priorities

in order to get through the material to meet the requirements of standardized tests.