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| Speaker | Line | Transcript | Time | Comment |
| A | 1 | So, the big one I had was, there- there's clearly the debate about five eighths or five sevenths. And, I just want them to realize that both of them are equivalent answers. So, like, not equivalent, but they're both correct in different contexts. It really depends on what you're talking about. And the problem is, in the big [inaudible 00:00:17] solution to it, it always boiled down to, "Well, they have to be equal parts." And the other side goes "They don't have to be equal parts." And one side says we're talking about triangles. No, we're talking about rectangles. You know? And so I just want to figure out how do we resolve that question. | 00:00 |  |
| B | 2 | How does [inaudible 00:00:30] | 00:29 |  |
| A | 3 | Yeah, how do we get them to actually realize what the equal part is in the argument. Because they're both talking about equal parts. | 00:30 |  |
| C | 4 | So, my wondering [crosstalk 00:00:38]. But, my wondering goes right back to our conversation this morning which is five sevenths is a ratio understanding of the fraction, I think. You're talking about 5 parts- five sevenths of the piece- of the number of pieces. That's a ratio understanding, I think. While the other is five eighths of the rectangle which is more of a different meaning, I think. | 00:35 |  |
| D | 5 | Parts of the whole. | 01:06 |  |
| C | 6 | Part of the whole- parts of the whole. So, to me, I'm wondering if- if that's and element of the- of why we have to start for ourselves to articulate those different meaning. I don't know. | 01:07 |  |
| A | 7 | I would five sevenths could also be considered parts of a set. Because the set is triangles. | 01:19 |  |
| B | 8 | Yeah. | 01:24 |  |
| A | 9 | No assumption about the area of the triangles. | 01:25 |  |
| B | 10 | Yeah. | 01:27 |  |
| A | 11 | Just that we're talking about triangles. | 01:27 |  |
| C | 12 | Yeah. | 01:29 |  |
| A | 13 | And that's why it's parts of a set. | 01:29 |  |
| E | 14 | If- if- if you- [crosstalk 00:01:30] if you substantiate it like that. | 01:30 |  |
| A | 15 | But the problem is these kids, like, I- I just want to be able to find the- the way that even- not tell them, but to find the key step, like he was doing in the cutting in equal parts. How do you find that key step that reveals the equal part you guys are looking for is that they're triangles, you know? Or, on the other side. That they do have to be equal parts, you were just talking about triangles, and these people are talking about area. [crosstalk 00:01:59] | 01:36 |  |
| F | 16 | Yeah, well we were just talking about that. | 01:58 |  |
| D | 17 | I think Nate solved the universe, over here. | 01:58 |  |
| B | 18 | Each day I try to. | 01:58 |  |
| A | 19 | (laughs) | 01:58 |  |
| D | 20 | He's making our lives better, step by step. | 01:58 |  |
| F | 21 | Um, I would draw a pizza. | 02:08 |  |
| A | 22 | The slices of pizza thing was right. | 02:11 |  |
| F | 23 | Which, kinda [crosstalk 00:02:17]. This is what I did for kids last year. A similar question, and uh, I would take a quarter of it or so, and shade in and say, "Okay, we're going to, you know, eat a, you know, you have a pizza party or whatever. And, you guys get that, and I get that piece. Right? And each of us got a half. Right? Obviously, we each got 1 out of 2 total slices." | 02:17 |  |
| A | 24 | (laughs) | 02:37 |  |
| F | 25 | And of course they'd all sat, you know, fighting over it. We know that's absolutely true, you get one out of 2, which is the argument they were making. | 02:38 |  |
| A | 26 | Yes | 02:44 |  |
| F | 27 | And then you would go to well, what does that actually mean then? And then, you know, you would get them to understand. Or, they'll do it. And so, we've actually got a quarter of it right? So now, what are we talking about? Well, it could be one fourth or one half. They're both correct, but what's the context? | 02:45 |  |
| E | 28 | Yeah. So when- when you use the word "half" to me, you take me out of ratio thinking and into equivalences. | 02:58 |  |
| A | 29 | Yes, agreed. | 03:07 |  |
| F | 30 | But that's what you're trying to get them to do. That's exactly right. 'Cause it's not a half. It's one- [crosstalk 00:03:12] | 03:08 |  |
| E | 31 | It is a half. | 03:11 |  |
| F | 32 | It's one slices out of two slices. | 03:11 |  |
| E | 33 | Right. | 03:13 |  |
| F | 34 | Total slices. | 03:13 |  |
| A | 35 | It's half of the slices, not half of the pizza. | 03:14 |  |
| F | 36 | Half of the amount of slices, yeah. | 03:16 |  |
| A | 37 | Yeah, that's the key. | 03:19 |  |
| F | 38 | Which is accurate. That's true. | 03:20 |  |
| A | 39 | So the- the I guess the key is to [crosstalk 00:03:24] make them angry. (laughs) | 03:22 |  |
| C | 40 | The ra- the ratio understanding. What I'm calling the ratio understanding, the one half- the one piece- one piece out of two. Do you have to then be able to use it- it's one half of something. It's not- it's half of the pieces. | 03:25 |  |
| E | 41 | Right, it's not half of the pizza. | 03:44 |  |
| C | 42 | It's not half of the pizza. And so I'm wondering whether we always have to say if we're in context, what is the context. And somehow- | 03:46 |  |
| G | 43 | So, putting it back on this, it's either five sevenths of the pieces, or five eighths of the rectangle? | 03:59 |  |
| A | 44 | Yes [crosstalk 00:04:06]. And I feel like that was with the discussion was really going towards. Especially with the red vs green. Because the was without context. The five sevenths was without context. And what he was [crosstalk 00:04:16] | 04:05 |  |
| G | 45 | Which they pointed out. | 04:16 |  |
| A | 46 | They did. They were very good about that, they were great about that. [crosstalk 00:04:18] | 04:18 |  |
| E | 47 | What were you- what were you going for there, Skylar? | 04:19 |  |
| B | 48 | Think about, I may have even put the rec- the red rectangle on the wrong thing. (laughs). But, I wanted them to recognize that what I had in words was a ratio that made sense with the problem, and a fraction as a fraction didn't make sense with the picture. At least that was my thinking. My under- my understanding was when- if you just write that thing as a fraction, or it's just 5 to 7, that's not a ratio unless it says 5 blanks 2, 7 blanks. Just the number by itself isn't- isn't a ratio. It's a fraction. | 04:22 |  |
| F | 49 | Yeah, and that's where they got. But, I agree that we could say, "You have five sevenths of all the total sections." | 04:53 |  |
| B | 50 | You could say that. [crosstalk 00:05:02] | 04:59 |  |
| A | 51 | It doesn't have to be a ratio understanding. | 05:02 |  |