- 00:00 Let's look at another one. Could you, on your paper right now, just put a line under the work you just did for that section. O.K.?
- 00:12 Let's look at the next one. Joe, Sarah and Alex each counted thirty beans. Joe took twenty seconds. Sarah took twenty-four seconds.

Alex took fifteen seconds.

- 00:30 I want you to do the same thing. First, represent or write each of their rates. Joe's rate. Sarah's rate and Alex's rate as ratios. O.K.?
- 00:46 Remember, they aren't ratios without what? What do we need? Yeah?
- 00:52 The slash sign.
- 00:53 Say it again.
- 00:54 The slash sign.
- 00:57 O.K. That's important. Absolutely. Yeah.
- 01:01 Like what they are doing. Like beans or seconds.
- 01:05 Beans. Seconds. Words. O.K.? So, write these as ratios. Expressing each of these people's rate.
- 01:16 And then explain, convince me, who is fastest. O.K.?
- 01:23 You can prove it any way you want. Any way you want. So the answer to your question is sure or there are multiple ways to do it.
- 01:40 Your way is totally valid. Totally valid and it's a real, clear way of understanding who is fastest. Did you need to do that?
- 01:49 Could you have done it in another way?
- 01:53 Yeah but I did it in this way.
- 01:55 Could you show me a second way? Right over here? Put a line there. Or you could write a sentence telling be how you could have done it a different way.
- 02:08 Give me a thumbs up if you've got your idea down. O.K. If you want to take a minute to discuss it with your group when you've got it down please do that.
- 02:26 It's interesting that so many people are going to unit rate. Could you tell us when we share out why it's not necessary? Because you haven't each time.
- 02:38 You've seen something each time. You're not the only one. You don't have to share it. Just thinkin'. All right let's talk about this.
- 02:48 Who's the winner? Who is the fastest for this one? Kender?
- 02:55 Alex because he's got the fastest beans per second.
- 3:00 The fastest beans per second. And how do you find that? How do you know that?
- 03:14 Seconds per beans?
- 03:17 He had the fastest seconds per bean. What were Alex's seconds per bean rate?
- 03:32 Point five per second.
- 03:35 Let's start with the original rate. What was his seconds per bean rate?
- 03:44 Fifteen seconds for thirty beans.
- 03:50 Fifteen seconds for thirty beans. Great.
- 04:00 You know what? Let's get each of their rates down just right now. Let's just get this down so we can talk about Sarah, Alex and Joe.
- 04:12 So tell me what Sarah's rate is and if you could put it in the same format Kendrick did I would appreciate it.
- 04:19 She gets thirty beans in twenty-four seconds.
- 04:29 Sarah, does what?
- 04:32 She gets thirty beans in twenty-four seconds. How about one more? Mikey?
- 04:47 Joe gets thirty beans in twenty seconds.
- 04:55 Thirty beans. Twenty seconds. O.K.
- 05:09 Kendrick tells us that Alex is the fastest based on the rate. Based on these rates up here can we tell who is the fastest? Brenda?
- 05:23 We can because, we can just see over the amount of beans they have, which is the same amount.
- 05:31 So in each rate, the beans are the same. O.K. Go on.
- 05:38 So then you look at their seconds, because that is, you see how many seconds they have or the least amount of seconds they had counting thirty beans.

- 05:53 So then Alex won because he had the least amount of seconds counting the same beans.
- 05:58 Least number of seconds counting thirty beans. Did you want to expand on that?
- 06:04 Yeah, he only takes fifteen seconds to count thirty beans...
- 06:09 but Sarah and Joe take twenty-four and twenty seconds to count thirty beans so he goes the fastest to count thirty beans.
- 06:18 Crissy. Thank you. Emily then Mikey.
- 06:24 If you switch the rate around. Depends like, for seconds per beans you want the least amount and then for beans per second you want the more amount.
- 06:37 What are you referring to because I think you are saying something really important and I want to...
- 06:44 Since the rate is seconds per bean on this one.
- 06:50 On this one?
- 06:51 Yeah. You want the least amount of time but then if you switch it to beans per second you want the more amount of time. Or the more amount of beans.
- 07:01 So, I like that. So. Not certain how to write what you said though. I got it. In seconds per bean, we want... more what? Or less what?
- 07:32 Less seconds?
- 07:40 Seconds per beans, we want less seconds. In beans per seconds we want...
- 07:44 More beans.
- 07:45 More beans.