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.