7.0.115	T/R 1:	Does anybody want to add to that? Sarah, Beth, okay, well it's something to think about isn't it, as we make, uh, different models. Um I remember that you wrote about the models that you worked on and I, I'm looking forward to reading them and, um, knowing more about they way you think about them. Let's try a different one. Ok, let's try a different one. Let's see what happens here. So this is the problem I would like you to think about. I'm wondering which is bigger, one half or two thirds. [pauses] Now before you model it you might think in your head, before you begin to model it what you is bigger and if so, if one is bigger, by how much. Why don't you work with your partner and see if you can figure it out.
7.0.234	Erik:	One half, where's the dark green, one half or two thirds.
7.0.235	Alan:	This time you [inaudible]
7.0.236	Erik:	This time I what?
7.0.237	Alan:	Two thirds are bigger. Look
7.0.238	Erik:	Exactly
7.0.239	Alan:	Two thirds are bigger by one sixth. And one half is one bigger than one third by one sixth. But also, making a train model,
7.0.240	Erik:	Oh no
7.0.241	Alan:	Create a chain reaction using the theory of relativities
7.0.242	Erik:	Ok, it's bigger by
7.0.243	Alan:	Who's using up all the twosies?
7.0.244	Erik:	It can't be done. Can't be done.
7.0.245	Alan:	A half is not bigger than two thirds.
7.0.246	Erik:	Oh this is the exact-
7.0.247	Alan:	This is one half
7.0.248	Erik:	This is the exact same problem we had before except it's one third, remember?
7.0.249	Alan:	It's only one sixth [Alan's second model –Figure F-26-10]
7.0.250	Erik:	This is easy. One half is larger than one third but smaller
7.0.251	Alan:	It's still one sixth
7.0.252	Erik:	Of course. It's larger by
7.0.260	Erik:	Two thirds is bigger.
7.0.261	Alan:	Ok. Look. These are two thirds. Which is bigger? See? This is bigger [uses train model].
7.0.262	Erik:	Well, one half...
7.0.263	Alan:	Erik,
7.0.264	Erik:	Yeah?
7.0.265	Alan:	Look. This is two thirds.
7.0.266	Erik:	Yeah, I know.
7.0.267	Alan:	That is one half. Which is bigger, the two thirds or the half?
7.0.268	Erik:	Two thirds. Of course!

Description: Clip 3 of 5: Alan and Erik compare one half and two thirds **Parent Tape: Discovering equivalent fractions and introducing fraction Notation** **Date: 1993-10-04** **Location: Colts Neck Elementary School** **Researcher: Professor Carolyn Maher**	Transcriber(s): Yankelewitz, Dina **Verifier(s): Yedman, Madeline** **Date Transcribed: Spring 2009** **Page: 2 of 2**

7.0.269	Alan:	You're right!
7.0.270	Erik:	Now I can easily make a train model.
7.0.271	Alan:	You can easily quarter it.
7.0.272	Erik:	Could I have the purples? Thank you, three purples, that's all I needed.
7.0.273	Alan:	We still haven't [inaudible]
7.0.274	Erik:	What? Dark green! Oh no, that's a black. Let's see, where's another dark green, where's another dark green, ah! There we go!
7.0.275	T/R 1:	Gentlemen? What do you think?
7.0.276	Alan:	He used up my example.
7.0.277	Erik:	I have it right here!
7.0.278	T/R 1:	Ok, is it possible to make another example, Alan?
7.0.279	Alan:	Yeah I guess.
7.0.280	T/R 1:	Would it still work?
7.0.281	Alan:	Yeah.
7.0.282	T/R 1:	You're sure it would work?
7.0.283	Erik:	Just like we did! Two after the other can be third-
7.0.284	T/R 1:	By the way, which is bigger?
7.0.285	Alan:	Ok. We figured out by taking out
7.0.286	Erik:	Because if you have, we figured that, well, let me just see, right here, both models we have the halves and the thirds. Like, it was like the other problem, it was one half and one third. And we explained it, we said that one half was bigger than one third but smaller than two thirds. Like up here, there's one half right there, and there's the thirds, there's the second third
7.0.287	T/R 1:	By how much?
7.0.288	Erik:	One sixth.
7.0.289	T/R 1:	But about one half and two thirds.
7.0.290	Erik:	One- oh that's exactly, that's exactly what we meant. These are two thirds and that's one half
7.0.291	Alan:	With one of the thirds, it would be a sixth. But if you added one, it would still be one sixth.
7.0.292	T/R 1:	Ok, could you write it up and any others you can find, gentlemen? And be ready-