1	00:14:25	JEFF	All right. So-
2		ROMINA	Pick a dot.
3		JEFF	Right there.
4		ROMINA	One, two.
5		JEFF	Two. All right. Here.
6		T/R2	We also have more to choose from.
7		JEFF	Jesus.
8		T/R2	There's graph paper there. Okay
9		ROMINA	Okay. So one, two, three- Oh, is this going to be dumb and stuff? One, two, three, four- It looks like a multiplication table. (00
10		JEFF	All right. Uh, one-, two [Inaudible]. [Brian draws his eighth symbol on the right side of the grid and writes "1, 4, 2." On the top of "1, 4, 2" he writes "DRD." He also goes back to 7 and writes "D3, R1". He has written a number with each of the first 6 symbols on Brian's paper, too.]
11		ROMINA	All right.
12		JEFF	Why don't you just- here, use blue. It doesn't matter.
13		ROMINA	Yeah. One-
14	00:15:30	JEFF	One- //two.
15	00:22:52	ROMINA	Mm hmm. Or you go all the way top to bottom.
16		JEFF	There's nothing else to do? Right? Now that would be the opposite of that one. That would be the opposite of that one and that would be the opposite of that one. //They're all covered. [Pointing to pairs of routes on the grid with a pen.]
17		ROMINA	//So we got six. Good. Good thing we did that over again. (00
18		JEFF	All right, well. Yeah, good because at least we're- you know, //we're- we're making

			progress. [Romina writing 6 on her transparency of centimeter paper in the square that represents a two-by-two grid.]
19		ROMINA	//Yeah, all right. And go-
20		JEFF	All right. //The three-
21		ROMINA	//Three and two. [Jeff draws three vertical lines, creating four three-by-two rectangles.]
22		JEFF	The greatest MC in the world. [Singing.] Look at that. Beautiful. [Drawing three-by-two rectangles on the grid and crossing out the others]
23		ROMINA	Tell me you know how to count those. All right. [Jeff crossing out the 6 different 2 by 2s he just drew shortest routes on.]
24		JEFF	All right. We can go like this, and that's the only way- [Drawing the one 2-down, 3-across route.]
25		ROMINA	Right.
26		JEFF	-to do that.
27		ROMINA	You want-, you want to do them in couples? (00
28		JEFF	Now the opposite of that is that right there. So that's that covers those two. [Underneath the previous route, drawing the one three-over route.] Now, the other way- now we've got to go one down like that. [Using a red marker to draw a route one-down, three-over.] And the couple of that would be- //I'm not-
29		ROMINA	//[Inaudible].
30		JEFF	-not exactly sure so wait.
31		ROMINA	We can't go in couples I mean.
32		JEFF	Yeah well-
33		ROMINA	All right, I'm going to open the windows.
34		JEFF	Ah yeah? [Draws 2 more one-down routes in his 3-by-2 grids.]
35		Cameraperson	What's making noise here? [Inaudible]?

36		ROMINA	[Inaudible].
37		Cameraperson	I understand.
38		JEFF	All right.
39		ROMINA	What'd you get?
40		JEFF	I don't know. I'm waiting for you, man.
41		ROMINA	All right. One, two-
42		JEFF	All right. That's that- [With his pen, pointing at the different three-by-two routes on the grid in which the first move is one down.]
43		ROMINA	Mm hmm.
44		JEFF	And that's that. And then, you know, that's going one over. It's going two over. It's going //three over.
45		ROMINA	//Three over.
46		JEFF	That covers all going through the middle.
47		ROMINA	Mm hmm.
48		JEFF	Correct?
49		ROMINA	Yes.
50		JEFF	All right. So now we've got to start going to the top. You can go one over, down, over. You can go one over or two over, down. You could also go one over, down two and over. You could also go- [Drawing the route.]
51		ROMINA	We've got eight so far, right?
52		JEFF	Could also go, um, two over, two down and over. [Draws the route.]
53		ROMINA	Mm hmm.
54		JEFF	Anything else? That's one, two, three, four, five, six, seven, eight, nine. Oh, it's nine because that one doesn't have a couple.
55		ROMINA	Yeah, //okay.
56		JEFF	//Those are couples, uh, this one and that one are couples, uh- [Pointing to routes and matching them with marker.]
57		ROMINA	//The one going-
58		JEFF	//These two are couples. [Pointing with

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			marker.]
59		ROMINA	The one going all the way across in the middle is never going to have a //couple.
60		JEFF	//Never going to have a couple.
61		ROMINA	Because-
62		JEFF	That's- //so that will always be odd.
63		ROMINA	//All right, so you can't [Inaudible].
64		JEFF	So every other one will be odd because there will be one going fully across the middle. Right? That's why that's nine.
65		ROMINA	Well that can't be odd because it's-
66		JEFF	Hey- 'cause that- that won't-
67		ROMINA	Maybe any one with an odd length or width.
68		JEFF	Which would be every other one.
69	00:24:15	ROMINA	Yeah.
70	00:34:00	JEFF	Nah, there's one after that. So, if we could get to there it would be, uh, big time you know what I'm saying?
71		ROMINA	It's this one.
72		JEFF	This one right here?
73		ROMINA	Mm hmm.
74		JEFF	Three by-
75		ROMINA	Yeah.
76		JEFF	All right, well we're on- what are we on? Two by four? [Brian writing rows of numbers 0, 1, 2 or 3 silently. Michael has routes drawn all over his paper. He continues working.]
77		ROMINA	Mm hmm. That's not going to be enough.
78	00:35:00	JEFF	That's all right. We can make more.
79	00:37:00	JEFF	You got that?
80		BRIAN	Man, I'm giving up on it.
81		ROMINA	Hum, that's kind of weird.
82		BRIAN	Mike here's the list. So far I've got some of the things [Inaudible].
83		MICHAEL	How many have you got there, thirty?
84		BRIAN	No that's only like //[Inaudible].

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85		JEFF	//I think- I think we should like [inaudible] on like the next one we do, I think we should just like //do all ones over one. [Motioning across with his pen.]
86		BRIAN	//D's is like down- //down one.
87		JEFF	//All those, you know what I'm saying?
88		BRIAN	Like the order.
89		JEFF	What else? Is there anything else?
90		ROMINA	No.
91		JEFF	That should be it.
92		ROMINA	That looks nice too, what they're doing.
93		JEFF	What?
94	00:37:35	ROMINA	Brian, see that looks like a much- when you do like the-
95	00:43:02	MICHAEL	Huh?
96		ROMINA	three over and two down.
97		JEFF	One, two- Uh, that's [Inaudible].
98		ROMINA	Couldn't we just do something like in towers where like lines over are like the color and the lines down are the, um, number of blocks?
99		JEFF	All right. And that would?
100		ROMINA	Because, okay, lines over- because what is it- the number of blocks to the number of colors?
101		JEFF	I don't know what you're- what- what's that?
102		ROMINA	Two to the n. Two is the amount of blocks or the colors? (00
103		MICHAEL	For what? Like towers on them?
104		ROMINA	Yeah.
105		JEFF	Colors. n is the number of blocks. I think. I don't know. I'm not sure.
106		MICHAEL	Well you figure a block has this- you got two- two towers over like this. Or two colors actually. I think it's, uh, the colors and n is the blocks.
107		ROMINA	Color two- //right. [Writing the words "color" and "blocks" on a piece of paper.]

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108		JEFF	//Same thing.
109		ROMINA	All right, here we have one color- nah; it doesn't work for the first one.
110		ROMINA	Scratch that idea. [Crossing out the words on her paper.]
111		JEFF	Well- why- you know, what happened to the- to what we were doing?
112		ROMINA	No, I know. Just keep on going. [Jeff, Brian and Michael working silently.]
113		JEFF	All right.
114		ROMINA	You're right [inaudible] three by two.
115		JEFF	Can you help me out?
116		ROMINA	What- what [Inaudible] //by two of this sheet?
117		BRIAN	//That's what I got so far.
118		ROMINA	//You need one [Inaudible]?
119		BRIAN	//That's how far right there. It's on the board. //The board.
120		ROMINA	//I know, I'm looking for- [Jeff continuing to draw routes.]
121		BRIAN	Mike do you see anything that I'm not getting?
122		ROMINA	//Three by three.
123		MICHAEL	//Which one you doing?
124		BRIAN	Two by three.
125		ROMINA	Three by two. All right, here. This is what we got.
126		JEFF	It's really hot in here.
127		ROMINA	All right, we got down two over three. Over three, down two. [Brian drawing routes on the chalkboard while Romina reads off her possibilities.]
128		BRIAN	//Okay.
129		ROMINA	//That's one of those? The first one.
130		BRIAN	It's like four moves.
131		ROMINA	All right we got those. [Brian continues writing on the chalkboard.] Got down one over three.
132		ROMINA	Except they don't have one, one, one, one, one,

			that one.
133		JEFF	That's one we don't have?
134		ROMINA	We don't have his last one over there. Check. I think that was the only one. So that nine does equal ten. [Brian writing, "start over" on the chalkboard and the word "Moves" up top.]
135		JEFF	I don't see uh- Um- two, four, six, eight...
136		ROMINA	Because we don't have that one?
137		JEFF	No, we don't have that one. [Inaudible]. [Romina erases the 9s and writes in 10s. She also writes a 5 under the 4.]
138	00:46:46	ROMINA	All right. It's, um, - it's Pascal's triangle. [Looking at the numerical array of the 1-centimeter-grid transparency.]