

Description: Clip 5 of 6: Solving problem 5 Parent Tape: Early algebra: Investigating linear functions, Series 4 of 7: Guess My Rule problems 4 & 5 Date: 2005-11-03 Location: Frank J. Hubbard Middle School – Plainfield, NJ Researcher: Carolyn Maher	Transcriber(s): DeLeon, Christina Verifier(s): Yedman, Madeline Date Transcribed: Spring 2013 Page: 1 of 4
---	---

Line	Time	Speaker	
1	00:00	R1	What if I say thirty? Thirty, write thirty. Thirty, and I say that the y value is a eighty-two. Do you think I'm right?
2		Ariel	Eighty-two, I think...
3		R1	Now for twenty-six, how much would that be?
4		Ariel	Twenty-six would be seventy.
5		R1	Twenty-six would be how much? It's right here (pointing to paper) Okay for twenty-seven, for twenty-eight, for twenty-nine, for thirty, thirty-two (Ariel is counting along). How could I predict that without doing all this process?
6		Ariel	Umm... I have no idea...
7		R1	If x is zero you get negative eight
8		Ariel	What I noticed was half of twenty, to get twenty-two it was fifty-eight half of twenty-two is eleven. Oh yeah, what's twenty-five. And twenty -five times three is fifty.
9		R1	Twenty Five
10		Ariel	Yeah, fifty times three.
11		R1	Twenty-five times three, how much is twenty-five times three?
12		Ariel	Seventy-five, I mean seventy-five. So (inaudible)
13		R1	Twenty-fiive times what?
14		Ariel	Two, twenty-five times two equals fifty. Cuz eleven times two is twenty-two is fifty and then if you add eight you get that. And thirty-eight, half of thirty-eight is, I mean thirty is fifteen and fifteen and thirty-seven. Thirty-seven times two is... Ok... Seventy-four plus eight. I think times three is eight. I mean times two plus eight.
15		R1	What times two plus eight?
16		Ariel	Umm.. like
17		R1	What number was it?
18		Ariel	I did for the twenty-two and for the thirty.
19		R1	Okay, for thirty you found it was what times two?
20		Ariel	Fifteen times two.
21		R1	Fifteen?
22		Ariel	No, thirty-seven times two.
23		R1	For thirty?
24		Ariel	Yeah for thirty. Cause half of thirty is fifteen and what I got for

Description: Clip 5 of 6: Solving problem 5 Parent Tape: Early algebra: Investigating linear functions, Series 4 of 7: Guess My Rule problems 4 & 5 Date: 2005-11-03 Location: Frank J. Hubbard Middle School – Plainfield, NJ Researcher: Carolyn Maher	Transcriber(s): DeLeon, Christina Verifier(s): Yedman, Madeline Date Transcribed: Spring 2013 Page: 2 of 4
---	---

			fifteen was thirty-seven. And thirty-seven times two...
25		R1	Why do you take half of thirty?
26		Ariel	Cause that times two gets you thirty.
27	3:33	R1	Ah, because you want to relate it to those numbers. So, half of fifteen, half of thirty is fifteen so it's thirty-seven.
28		Ariel	So two thirty-seven's will be seventy-four plus eight is eighty-two.
29		R1	Thirty-seven plus?
30		Ariel	Eight, I mean, thirty-seven times, I mean, plus thirty-seven is seventy-four plus eight is eighty-two. And for twenty-two...
31		R1	So in that case to get thirty, we would do two times thirty-seven plus eight
32		Ariel	Multiply the y value by two and then add eight.
33		R1	Ok let's see here. Zero. What is the corresponding value for zero?
34		Ariel	Negative eight
35		R1	Negative eight. X is going to increase by one. When x is one what is the corresponding value?
36		Ariel	Umm, negative five
37		R1	Negative five, more or less than the amount that corresponded to zero?
38		Ariel	More
39		R1	How much more?
40		Ariel	Negative eight plus three
41		R1	So, it means that it is increasing right? So to zero, it's negative eight. To one, it's negative five. So it means three more, right? To two is how much?
42		Ariel	Negative two.
43		R1	How much more than the number corresponding to zero?
44		Ariel	Negative five plus...
45		R1	No here, to two is negative two.
46		Ariel	It's six more.
47		R1	Six more. To this one it was how much more?
48		Ariel	Three.
49		R1	To this number is?
50		Ariel	Six.
51		R1	Six more. To three it will be?

Description: Clip 5 of 6: Solving problem 5 Parent Tape: Early algebra: Investigating linear functions, Series 4 of 7: Guess My Rule problems 4 & 5 Date: 2005-11-03 Location: Frank J. Hubbard Middle School – Plainfield, NJ Researcher: Carolyn Maher	Transcriber(s): DeLeon, Christina Verifier(s): Yedman, Madeline Date Transcribed: Spring 2013 Page: 3 of 4
---	---

52		Ariel	Nine, wait I thought you meant for this. So for three it will be minus two.
53		R1	So for that how much more is that than the amount corresponding to zero?
54		Ariel	Nine.
55		R1	Nine, so do you see any pattern?
56		Ariel	Yea, three, six, nine, so then the next one will be twelve. Because four. Yeah twelve.
57		R1	Twelve? So for four how many times... how much did it increase?
58		Ariel	It increased by twelve because negative eight plus twelve is four.
59		R1	So four increased by twelve right? This increased by twelve. When it was four it increased by twelve?
60		Ariel	No
61		R1	No? Oh yeah but if you okay if we refer to zero. We see when we watch one it increased by three, when you watch two it increased by six, when you watch... compare it to zero. When you watch three, it increase (inaudible) when you watch four it increased to twelve. So how can you get to twelve using four as a factor?
62		Ariel	Four times three, times three plus eight.
63		R1	Times three plus eight. Write it down. Okay, so for zero that would be what? Times three, that would be?
64		Ariel	Zero times three... zero plus eight (following along with what R1 is saying)
65		R1	Zero plus eight, that would be? Eight not negative eight. So is it plus eight?
66		Ariel	No minus eight.
67		R1	Write it minus eight. Okay so try it again.
68		Ariel	So it's times three minus negative eight
69		R1	Minus eight or minus negative eight
70		Ariel	Minus eight.
71		R1	What about one?
72		Ariel	One times three is three minus eight is negative five
73		R1	What about the next one?
74		Ariel	Two times three is six minus eight is negative two.

Description: Clip 5 of 6: Solving problem 5 Parent Tape: Early algebra: Investigating linear functions, Series 4 of 7: Guess My Rule problems 4 & 5 Date: 2005-11-03 Location: Frank J. Hubbard Middle School – Plainfield, NJ Researcher: Carolyn Maher	Transcriber(s): DeLeon, Christina Verifier(s): Yedman, Madeline Date Transcribed: Spring 2013 Page: 4 of 4
---	---

75		R1	How do you get y?
76		Ariel	How do you get y? Multiplying by three and subtracting eight.
77		R1	So y equals y equals...
78		Ariel	Y equals times three minus eight
79		R1	Is that the rule? Can you make sure that this is the rule
80		Ariel	Cause, five times three is fifteen minus eight is seven. Six times three is eighteen minus eight is ten. Seven times three is twenty-one minus eight is thirteen.
81		R1	Yeah, you got it.