

## Connecting Different Solutions to Each Other

- 1 Mrs. Mossotti: So in the beginning when you did your noticing, a lot of you guys noticed that  
2 the graph kept going up with the more tickets that you buy. And question number  
3 two talked about exactly how it increased. So Crispin is going to come up next  
4 because he noticed something. He is noticing exactly how it increases. And he's  
5 going to tell you how his brain thought about how this graph is increasing with  
6 the more tickets that you buy. Go ahead. Go over there. Point to stuff.
- 7 Crispin: When I first asked the question what would the cost of four tickets would be, I  
8 looked at what the previous graph had shown. So it had shown for 10 tickets it  
9 was \$13.00. Then for eight tickets it was \$12.00. And then I looked here, and I'm  
10 like this one is in between here. So I got confused. So then I just lined them up  
11 with my ruler, and then I saw something. I saw that these two had a pattern.  
12 Because for the even numbers for the amount of tickets, they would separate  
13 with two spaces going downwards gradually. And for the odd numbers--
- 14 Mrs. Mossotti: Hold on Crispin, can you it say one more time about this even pattern and point  
15 to exactly on your graph where you're talking about.
- 16 Crispin: Well the even amount of numbers of tickets you see that they were apart by two  
17 grids gradually heading downwards. And the odd ones were in between them  
18 right in the middle, which got me thinking--
- 19 Mrs. Mossotti: I'm going to pause you for a second. Somebody come up and tell me exactly  
20 what Crispin is talking about with this even and odd stuff. Keaton. Are you able  
21 to talk about it or point to it?
- 22 Keaton: Every even number curving down is skipping two lines.
- 23 Mrs. Mossotti: So here's two. Here's four. What about them?
- 24 Keaton: You're skipping more than one line.
- 25 Mrs. Mossotti: You're skipping how many lines?
- 26 Keaton: Two.
- 27 Mrs. Mossotti: Which way?
- 28 Keaton: Two to the right.
- 29 Mrs. Mossotti: So you're going two to the right. OK and keep going. So that's our even stop. So  
30 I'm skipping two when I count by even numbers. That kind of makes sense. Two  
31 to four is jumping up two. Jumping up two. Jumping up two. Jumping up two.  
32 What else did Crispin notice about these even tickets? Okay, Crispin talk to them  
33 one more time. I'm going to call on somebody to talk about what Crispin's  
34 talking about with this even amount of tickets.

- 35 Crispin: Well, I noticed that with the even amount of tickets, they're from the even  
36 amount-- like let's say 10, for example. 10 would be \$13.00 And then eight  
37 would be \$12.00. And they're gradually heading down. By two units going down.
- 38 Mrs. Mossotti: Two units going which way?
- 39 Crispin: Downwards.
- 40 Mrs. Mossotti: What do you mean downwards?
- 41 Crispin: Like they're going down gradually. If you look at the amount of money, money is  
42 like the even numbers are two. It's for two going to four. It'd be one whole dollar.  
43 But then for the odd numbers it's going up. When you see it going up, it lands  
44 right in between them. Which got us thinking that maybe the price of one ticket  
45 will be \$0.50.
- 46 Mrs. Mossotti: Why does this show that each ticket is \$0.50? I don't understand. I don't see  
47 \$0.50 anywhere. He's talking about even odds, and all of a sudden he's talking  
48 about \$0.50. How does his brain come up with \$0.50 from evens and odds in the  
49 way that this graph looks? And what about these points at even numbers? Even  
50 amounts of what? Down here. This even number is for what? (walks to the  
51 board) Here, scooch over Naz. Down here, this even number is 10 what?
- 52 Multiple students: Tickets.
- 53 Mrs. Mossotti: This even number is eight what?
- 54 Multiple students: Tickets.
- 55 Mrs. Mossotti: So when there's even amounts of tickets what else did Crispin notice? Kaelin  
56 keep going.
- 57 Kaelin: Every time it was an even ticket, the cost was going up \$0.50.
- 58 Mrs. Mossotti: What do you mean?
- 59 Kaelin: So he said odd and even. So the cost started off at \$8.50. When he went to two  
60 from one, the cost went up \$0.50 and it kept going to \$0.50 to get to 8 and 10.
- 61 Mrs. Mossotti: So when I go up this amount it's \$0.50? Because that's where this is. It's up that  
62 high.
- 63 Kaelin: Yeah.
- 64 Mrs. Mossotti: And when I come over here, this was how many tickets?

- 65 Kaelin: One.
- 66 Mrs. Mossotti: And when I come over here, now I have purchased?
- 67 Kaelin: Two.
- 68 Mrs. Mossotti: So how is this graph changing? Turn and talk.