Increasing Area
Transcript

Teacher: Alright, I'm going to leave you for a minute.

Neal: [Reading] Find the expression that using x gives the amount of area. So x plus 5, no x, parentheses x + 5 squared.

Veronica: [Inaudible]

Neal: Huh? .5

Mikaela: What?

Patrick: Why squared?

Neal: A, or,

Veronica: B, we're on B, right?

Neal: Yeah, yeah for 1B.

Veronica: Oh, so we're already done with A?

Mikaela: But we drew the diagram. I don't—

Patrick: Alright, now [reading] we need an expression using x that gives the amount by which—

Mikaela: Wait, what's the expression?

Neal: Parentheses x plus .5 squared

Patrick: x plus .5 squared

Veronica: Why is it in parentheses?

Neal: So we don't square the .5.

Patrick: But won't the .5 squared just mean plus…

Mikaela: Oh, got it, got it.

Patrick: …0.25. That wouldn't really make sense if it was like 2.

Neal: But the thing is that you want to square. The thing is you want to square the total area because if you were to square that first, you'd only find the area of one I think.

Patrick: Wait, so you're saying x plus 5, in parentheses, squared.

Mikaela: x plus…

Neal: No like this.

Mikaela: No x plus .5…

Patrick: That, that's what I meant. Yeah, okay.

Mikaela: x plus .5.

Patrick: Yeah, that's what I meant. That's what we said.

---A moment later---

Mikaela: [Reading] Find an expression, no, because listen. [Reading] Find an expression that, using x that gives the amount by which the area increased. Not the total area, the amount that it increased.

Veronica: So it's one, three, and two only [Inaudible].

Mikaela: So, I don't know.

Neal: One, three, two.

Mikaela: I did this. I don't know if it's right.

Veronica: It looks really hard.

Mikaela: It, this, this one. Did you get this?

Neal: [Inaudible] get three.

Veronica: x times .5 times .5.

Patrick: Wait, that, that seems a lot like, very, because that would be .25, and that would be, I don't get that. [pointing to Mikaela's paper] So like if it was…

Mikaela: 'Cause this would be .25, this would be the little corner.

Patrick: I don't, I don't know, let's, let's, let's use an example in your…

Mikaela: This would work right? To find the amount it increased?

Patrick: Let's. Wait, let's use an example first.

Neal: Yeah.

Mikaela: Cause this would find…

Neal: Yeah, uh huh.

Mikaela: Look because this would find…

Patrick: Wait guys let's use an example.

Mikaela: …this half and this half…

Neal: Okay.

Mikaela: …and this would find the corner.

Patrick: So, let's use 4 because that's the easiest and I know the answers.

Veronica: I think I got something.

Neal: Wait Patrick wants to do this first.

Veronica: Yeah, okay. I'll just save it for later.

Patrick: Our, our equation works because that's the exact number that we had for 4.

Mikaela: No, but we're not finding the total area…

Patrick: Yeah, it, we…

Mikaela: …we're finding the x.

Patrick: …No yeah, we are! The total area.

Mikaela: No, it says give the amount by which the area of Westfield increased.

Neal: So technically, you want to leave that 4 squared out and only find whatever [Inaudible]

Patrick: So we wanna just to have .5 squared?

Neal: No, what we want…

Mikaela: No look this.

Neal: …like that piece.

Veronica: Yeah, but don't forget the x times .5 [Inaudible]

Neal: Because its…

Patrick: Let, let me see this.

Mikaela: No, because it has to be squared, because it, for each side. Cause look, this is x times .5 and this is x times .5, so if we just write it once and write it squared, that's it for both of it.

Veronica: Yeah.

Mikaela: And then .5 times .5 is the little corner.

Neal: Wait, what'd you square?

Veronica: Unless…

Patrick: That wouldn't make any sense.

Neal: But the piece, I think you add it not square it. No you don't square them.

Veronica: Wait no cause its, if you were to do like, that's two x.

Mikaela: Oh you don't square it sorry.

Neal: You add them. No you…

Mikaela: You multiply it by 2.

Veronica: Yeah.

Neal: Or you could add them together again.

Veronica: See that's 2 x plus 2 times .5

Mikaela: Yeah you don't square it you just have to…

Neal: You don't square it you just add.

Veronica: I'm not squaring, I'm multiplying.

Neal: Okay. See.

Veronica: Just look at mine.

Patrick: Wait so it's 4 plus .5…

Veronica: Yeah.

Patrick: …times 2…

Neal: Yeah.

Patrick: …plus what?

Veronica: Um wait I forgot mine.

Mikaela: This would work right, this number?

Patrick: Let me see it.

Veronica: Yeah try hers.

Neal: And for the growth you'd just drop out the last x. If you just want the growth you just drop out that last x which is the original?

Veronica: I agree. I don't know, whatever you think is right.

Neal: Something's [Inaudible]

Veronica: Yeah, that's what she got.

Neal: See this is if you just want to find the growth.

Veronica: Yeah why'd they put the x in there?

Mikaela: Yeah that's what I did.

Patrick: That still wouldn't make any sense.

Neal: [Inaudible]

Mikaela: Yes it does.

Patrick: Oh, wait yeah it does I chose the arrow button [on the calculator].

Neal: See, here, I took off the [Inaudible]

Mikaela: See? It is correct.

Patrick: I guess.

Veronica: We got it.

Mikaela: Okay, now we're moving on to 2.