

PATTY FERRANT: You are talking about last night's homework with your partner.

STUDENT: ...of octagons and we're trying to find the sides for each [inaudible] to get 354. Pentagon has five sides, octagon has eight, so the question I got was $5p + 8o = 354$. And geometry teacher had said [inaudible] depending on the octagon, so $p + o = 60$. Now I must [inaudible] this equation by five then I get 5 pentagons plus 8 octagons equals 354. And now I subtract it by 5 pentagons plus 5 octagons equals 300 and I got 54, and divided by -3.

STUDENT: ...equals 350 and then I...you know what you do? You have to subtract it.

STUDENT: Yeah, yeah.

STUDENT: Because it's a positive. And then you do, uh... Oh, yeah. And I have $5p$ plus...I messed up. Never mind, never mind. Yeah, plus 50 equals 300 because you're supposed to...

STUDENT: Yeah, I got that too.

STUDENT: And then I got 30 for this one and then I crossed it out because there's nothing there. And then 54, and then you have to do it...yeah, you have to divide it by 3 and then $o = 18$.

STUDENT: Can I see your equation again? Yeah, there you go. And that is 18 octagons, right?

STUDENT: Yeah, x and y would be [inaudible]. Like, for that one yesterday it got me confused.

STUDENT: Okay, um...

STUDENT: So my first equation was $p + o = 60$, and then for the other one I got...the other equation was $5p + 8o = 354$.

STUDENT: And we had to do elimination because...what type of equation are these both?

STUDENT: Isn't it [inaudible]?

STUDENT: Yeah.

STUDENT: Yeah and then after I got $5p + 8o = 354$ and you're supposed to subtract. You're supposed to subtract, I don't know why I put add. And then equals 300 and then I got $3o$, and then 54. Then you're supposed to divide it by 3 and $o = 18$.

STUDENT: Okay.

STUDENT: For this one I substituted 18 into...what was it, 18? Yeah, 18 and then I got $5p + 144 = 354$. And then you're supposed to subtract it because it's a positive, and then you're supposed to divide it by 5 and then $p = 42$. Then I did it again -- $p + o = 60$ and then I did...

STUDENT: You substituted it?

STUDENT: Yeah, I substituted it and then $42 + 18 = 60$.

STUDENT: I did the same thing but I also multiply the 8 with the equation $x + y = 60$, and then I did elimination.

STUDENT: Oh, in this part right here?

STUDENT: Yeah and I got x is 42.

STUDENT: 42?

STUDENT: Mm-hm.

STUDENT: Okay.

STUDENT: And of course we still have to do elimination because either way it's a part and part plus part equals whole.

STUDENT: Mm-hm.

STUDENT: And if you have the part plus part equals whole you have to do elimination.

STUDENT: Yeah. So...

STUDENT: So we have 42 pentagons and 18 octagons.

STUDENT: Oh yeah.