

13: 6th\_Math\_Percent\_Main

Teacher: Okay, so, today, we're going to work on you guys being able to figure out the tax, a discount, and the tip that you would need at a restaurant, right? Okay, so yesterday, you guys did this. Look familiar?

Student: Is that the rubric?

Teacher: That's your rubric that you guys came up with. You guys said that even if you get one or two computation errors that you can still get it advanced.

Student: Wait, a computation error? Isn't it you had the totally wrong idea, you did the work right, but you got it wrong?

Teacher: Correct. If you did the right step, like you multiplied by the correct number, or you knew you had to cross-multiply, or whatever the step is, it's correct, but you went, "Five times five, twenty!" That's a computation error. Okay? Your decimal, you put it in the wrong spot, or something like that. Okay? That's a computation error. Are you guys still okay with that? All right. You also said that, "in order to have an advance, you have to write a sentence for the answer to all your word problems." You're not really ... your whole situation is a word problem.

Student: [inaudible 00:01:21]

Student: Is this the menu one?

Teacher: This is the menu one.

Student: Did you go to Assaggio and get the menu?

Teacher: I did!

Student: You did?

Student: You got Assaggio's?

Teacher: I got Assaggio's.

Student: Can I keep the menu?

Teacher: I gave you a miniature version, because the real Assaggio's menu is five pages.

Student: It's big.

Teacher: I'm like, "You guys are gonna be there for like half an hour just figuring out what you want to eat," so I just did a couple pages. Yeah. Got some pasta, got some salads, and some drinks.

Student: Is Fettuccine Alfredo on there?

Student: Did you get dessert?

Teacher: There wasn't any dessert on the menu. I think they have a separate dessert menu.

Student: No, it's like one of those where they give you the-

Student: Okay, we could just-

Teacher: [00:02:00] Oh yeah, they bring out the tray and they go, "Dessert?" And you're like, "I'll take one of everything."

Student: [inaudible 00:02:09] Christmas plans.

Student: [inaudible 00:02:11].

Teacher: Yeah. Okay. In terms of the second one, the rubric, it says, "Answer to word problems. Answer in a sentence." For this situation, what would your sentence be? It doesn't actually have a question in words at the top, but what are you guys coming up with? What are you finding?

Student: What do we want to eat.

Teacher: What you want to eat. What are you calculating with that, though?

Student: The discount.

Teacher: The discount. What would your sentence be?

Student: The discount would-

Student: The discount would be-

Teacher: Daniel.

Student: The discount is-

Teacher: "The discount is \$2.45," or whatever. Okay, good.

Student: A dollar blank.

Teacher: Yeah, and then the same thing for the tax, and the tip, okay? All right, so, you guys okay with that. "Shows all your work, even if you use the calculator."

Student: Yeah, cool.

Teacher: Easy enough?

Student: Yeah, cool.

Student: No.

Teacher: That's pretty easy, right?

Student: Wait, I don't get it.

Teacher: Okay, and then you said, "A reasonable estimate for the tip." What does that mean?

Student: You mean like-

Teacher: Maya.

Student: No!

Student: If you have four dollars and twenty-five cents, you would have to round up, or whatever your estimate will be for their tip.

Teacher: Okay, so if it was \$4.25, what would you leave?

Student: \$5.00.

Teacher: \$5.00, why?

Student: Because you wouldn't want to leave change on the table.

Teacher: Okay, you don't want to leave change on the table, so why would you choose five dollars instead of \$4.00.

Student: I don't know. To be generous?

Teacher: Be generous. Okay, that's totally fine. Like we were discussing-

Student: It's up to you.

Teacher: Yeah, exactly. Tip is up to you. It depends on how you feel you should honor your server for what they did for you that day.

Student: If you're-

Teacher: [00:04:00] Okay, so maybe you're at Assaggio's, and you're like, "Oh, my server. She's top-shape, she's good. So I'm going to leave that extra \$0.75," or, "Aw, she took so long. She was so rude. I'm only going to give her 4.00\$."

Student: Unless you're broke.

Teacher: Unless you're broke, then you tell your mom to leave the tip. Yeah, "Mom. Go ahead, Mom. Go, go, go." All right. In terms of proficiency, the main difference is you have more computation errors and then you're not writing sentences and you just are lazy, and just go, "I'm just going to leave \$4.25, cause I don't want to do anymore math. I'm just going to say, I'm going to leave \$4.25."

Student: No, if you're lazy, you'd leave the estimated amount, because you don't want to-

Teacher: But then you still have to do the work.

Student: Can we just do take-out? Then we wouldn't have to leave a tip.

Teacher: That would be really rude.

Student: Yeah.

Teacher: Oh, no, no. You're saying for take-out.

Student: Yeah.

Teacher: Oh, you're just going to order, call Assaggio's, and then you don't have to leave tip. Just pick it up and eat at home? Okay.

Student: Yeah.

Student: What if you forgot to leave tip?

Teacher: All right. Hopefully after this, maybe you'll be able to help out your parents with the tip and stuff when you guys go. You'll notice on your tables, you guys have a little packet there of tickets. Oh, you guys got double tickets.

Student: Oh, are we only supposed to get one?

Teacher: Yeah.

Student: Do I do this on my own, then?

Student: Yay, I still have one.

Teacher: If you got a packet of tickets, there's three different colors in there. You guys can open it up.

Student: They're spring colors.

Teacher: Spring! Of course, one's green.

Student: And one's pink.

Teacher: You guys can take out your tickets.

Student: You should have done the green for discounts.

Teacher: It was just random. They're all different.

Student: It's pink, yellow, and green.

Teacher: Take them out.

Student: Green, pink, yellow.

Teacher: Spread them out, so you guys have [00:06:00] all of them laid out in front of you.

Student: Flip over or facing up?

Teacher: You can face them up for now. Yeah, face up for now.

Student: Leave a 20% tip.

Teacher: All right, so you'll notice that your tips are all one color, your discounts and your percent are all one color, and then your tax is all one color, right? What you guys are going to do is after you figure out, hopefully it doesn't take you thirty minutes to figure out your order, you're going to figure out how much the food is going to cost you. Okay? Let me go here. Let's say you guys order Chicken Alfredo, you get a drink, and then you have Caesar salad. It comes to ... That's just me. That's just me, okay? Then my partner has to get something, too. You're putting both of your orders on that paper, okay? Maybe "student"'s my partner. "student" wants ravioli, he wants soup, and then he's going to have a soda.

Student: That's not healthy.

Teacher: Diet soda. We add all of it up, and just between the two of us, maybe, I'm just guessing it, comes to \$37.00 ... \$30.00 ... Oh my god.

Student: \$63.00.

Teacher: \$63.00.

Student: \$37.00.

Teacher: It's Tuesday.

Student: \$63.36.

Teacher: Okay, let's say it comes to this. That's the amount the food's going to cost. You're going to get to pick one discount. For today only, you get discount on your Assaggio's meal. You're going to turn your tickets over, and you're going to pick one discount. No peeking now. Oh, you can see through it? [00:08:00] "student"'s going to be like, "Where's that 25%? I'm taking the 25%." Flip them over now so you know which one is which, right? "student", pick me a discount.

Student: Okay. [inaudible 00:08:17]

Teacher: 20%. I would write 20% discount. Do you see where you would put that? In the thing-y on the worksheet? Wait, not you! You had never picked yet. That's mine. That's what I would get.

Student: It's you and "student".

Teacher: Yeah, that's me and "student". Just wait, because you guys got to do your own once you guys figure out what you want to eat. 20% discount. I figure out what my discount is. What do you do with a discount? "student".

Student: You multiply by the total.

Teacher: I'm going to multiply this by my total, and then what do I do once I get it?

Student: Subtract it.

Teacher: I subtract it. I get a new amount over here. Let's say it comes to, I'm guessing, I don't want to give you guys exact numbers, \$49.82 I'm guessing. What do I need to do now? That's my new price of my food.

Student: Don't you need to put the tax?

Student: Leave tip? Tax or tip?

Student: Tax?

Teacher: Tax. Pick a tax.

Student: 8%.

Teacher: 8%, we must be in California. 8% tax.

Student: Can that be zero?

Teacher: Nope, we're not in Oregon. Sorry. Cannot be zero.

Student: Lame.

Student: My sister's in Oregon.

Teacher: You find your tax. What do you do with it?

Student: You add it.

Student: Subtract it.

Teacher: You add it.

Student: Well, no. You multiply it.

Teacher: Well, yeah. I got to multiply first, and then add it, right?

Student: Oh, so you do that for the discount, too.

Teacher: Yeah, on the discount. You do it on the discount. [00:10:00]

Student: But then you subtract it.

Teacher: The discount's subtracted, yeah.

Student: Tax, done. I found my food total. This is going to be my food total. Okay. You eat all your food, you paid your bill. What's up next?

Student: Tip.

Student: Leftovers.

Teacher: Tip. Leftovers. I don't have leftovers when I go to Assaggio's, girl. I eat that whole thing. Okay. Well, unless I'm going to have dessert, then I'll eat only half, and then I can have dessert, right? Now we're going to have ... We have to figure out our tip. Now, what do you base your tip off of? We got a whole bunch of numbers up there. "student", what do you think?

Student: The total of the meal.

Teacher: The total of the meal. Now, I have two totals of the meal. I got this, and I've got this.

Student: The one with the ...

Teacher: What do you base your tip on?

Student: The first one.

Teacher: The first one. Okay, so this is what you base your tip off of. The original amount. You don't go, "Oh, I got a discount. I'm just going to give less tip now." Unless you want to be rude, whatever.

Student: Do they actually do the math, or they don't care?

Teacher: The servers, no, they know. They're like, "Oh, this person only left little bit," or, "Oh, yeah, I like this guy." You want to base your tip off the original amount, not this, not the discounted price.

Student: [inaudible 00:11:37]

Teacher: Okay, "student". Well, how was your server today? How much was your tip?

Student: 20%.

Teacher: Oh, okay, must've been pretty good. All right, so then you would find your 20%. Now, do you guys see on your paper? It says, [00:12:00] "Percent tip." You need to actually show what you would leave, because you're going to write your percent tip and you're going to find it, right? That's where this comes in. "Reasonable estimate for the tip." You need to tell us how much you're going to leave for your tip. Write a sentence. If it was \$4.45, Maya would've wrote, "I will leave \$5.00 tip." That's your sentence. Okay, so make sure you guys do that. You guys said, "For an advance, you have to do a reasonable estimate and you have to write a sentence."

Student: This is a test? Oh my god.

Student: Oh my god.

Teacher: Did I say test?

Student: [inaudible 00:12:44].

Student: Yes.

Teacher: Yeah. You know me and my words: always getting mixed up. For this lesson ...

Student: Lesson?

Student: Oh my god, yes.



Teacher: Okay. For this lesson, you guys have to do that. All right, so let's try not to take 30 minutes to choose your food.

Student: We don't have 30 minutes.

Teacher: I know, right? Okay, I left a space for you to do this twice.

Student: Oh, no.

Student: Oh, darn it.

Teacher: The second time you do it, you're going to pick new tickets and choose new items. "Fettuccine: junk. I'm going to have something else this time."

Student: That's my favorite!

Teacher: Nope, choose something else, girl. First time, get it with chicken, next time, get it with shrimp or something.

Student: Shrimp.

Teacher: Yeah.

Student: Shrimp!

Teacher: All right, so you're going to do it two times. I recommend you order more than one item. At least get a drink with it.

Student: What if we only get a drink?

Teacher: Yeah, you have to have a main dish. Salad doesn't count, unless you're on a diet. You shouldn't be on a diet, you're only 67 pounds.

Student: No, 69.

Teacher: Oh, sorry, 69. You need more pasta.

Student: [inaudible 00:13:58]. [00:14:00]

Teacher: Yeah, spend all that money and just get a drink. "I'm going to Assaggio's, what did you have?" "A soda."

Student: You can get a drink anyway.

Teacher: Okay, there's your menu.

Student: Ravioli!

Student: There's nothing to drink [inaudible 00:14:13].

Student: Is that the lowest?

Teacher: You're putting your order and "student"'s order on that paper.

Student: Can I just pick salad [inaudible 00:14:23]?

Teacher: You can have salad and one other thing.

Student: Mrs. , is mineral water fancy water?

Teacher: Yes. I recommend you just drink the water they give you on the table, it's free.

Student: Watch me pick the highest one.

Student: Just write it down.

Student: You feeling the mojo?

Student: I'm just feeling alive.

Teacher: Was that the highest? Yup! Okay, Peyton and "student" had a really good idea. They actually picked their tickets already and wrote it on the paper, so it's ready to go.

Student: That's what-

Teacher: Oh, you was all on that? Okay. They got their percentages ready. They're good, they're ready to go. Now they can just do their food. No, you got to put her food with her food.

Student: What are you getting?

Student: Wait, maybe we [crosstalk 00:15:34].

Teacher: You guys are putting your orders together now. Remember how "student" and I had dinner together? It's same-same.

Student: Aw!

Teacher: I know. How nice, it was "student's" treat, too. That's why I ordered plenty.

Student: So do we both do the math [crosstalk 00:15:51]?

Teacher: Yep.

Student: Aw, dang it!

Teacher: Why? You were just going to let "student" do it and copy him?

Student: No, we were going to ... He paid for his stuff, I paid for my stuff.

Teacher: [00:16:00] Oh, nope, put them together. Put them together. Did you forgot what you want to eat?

Student: There you go. What are you going to eat? You want soda?

Teacher: Woah, "student" got his food already, he's waiting for you.

Student: Lasagna?

Student: I'm getting delicious [crosstalk 00:16:17]

Student: It's \$3.75, right? Then, which one? The ravioli? The first one?

Student: Get the Caesar salad, it's good.

Teacher: Did you get your Fettuccine Alfredo?

Student: Yeah.

Teacher: With what? First round.

Student: Yeah, the first round.

Teacher: The broccoli.

Student: \$44.30.

Student: \$5.25.

Teacher: That's yours? That's just yours?

Student: No, that's all together.

Teacher: Oh, that's all together. Okay.

Student: We can't write on the menu, right?

Teacher: No. If you do, you can just erase it after.

Student: He doesn't know what to get. I'm waiting on him.

Teacher: Come on, "student".

Student: [inaudible 00:17:14].

Student: Just get spaghetti.

Student: I'll just get Rigatoni. What is that?

Student: Just get the cheapest thing.

Student: I'm ordering one you can eat.

Student: No, but you said I just can't get a salad.

Teacher: You have to have one other thing. Salad and a drink? Salad and soup?

Student: Oh, wait, I could've just got that?

Teacher: Salad and soup.

Student: Oh my god, "student".

Student: Get the salad and soup.

Student: Okay, let's add both of them up.

Teacher: What a waste to go to Assaggio's for salad and soup, yeah? Or Subway, or something.

Student: I know.

Teacher: Oh, I love Subway.

Student: [crosstalk 00:17:52] McDonalds.

Teacher: Dollar menu?

Student: Yeah.

Student: Yeah. [00:18:00] Jack in the Box.

Teacher: Make sure you guys question each other. "student". "student", what's the question I always ask?

Student: "Why is that on the top and why is that on the bottom?"

Teacher: "Why is that on the top and why is that on the ..." Except we're not doing that in this one.

Student: "What are you doing?"

Teacher: "What are you doing?" Okay. Don't just trust they got the right answer; you do the math, too.

Student: \$5.90 or the \$6[crosstalk 00:18:37]

Student: Where's the [inaudible 00:18:39]? Two plus one [crosstalk 00:18:38]

Student: [crosstalk 00:18:42] you have to add it.

Student: [crosstalk 00:18:45] to add it.

Student: \$40.00.

Student: How is this \$10.00 more than mine?

Student: I don't know.

Student: Oh, look, you have [crosstalk 00:18:51]

Student: I got salad.

Teacher: You guys have to put your two food together, so add his \$40.00 to your \$30.00. "student", did you get "student's" amount? You have to add it to the bill.

Student: Oh.

Teacher: Yes.

Student: Wait, I [inaudible 00:19:09].

Teacher: That's okay, we're loaded right now. We can pay for anything.

Student: \$71.00, oh my lord!

Teacher: Too bad we can't pay with Blazer Bucks.

Student: There's a whole stack of them.

Teacher: I know, that's why I would love to use Blazer Bucks.

Student: I could just copy.

Teacher: Yup, you guys are using the same discount. Did you put your two moneys together?

Student: Yeah.

Student: How much is your two-

Student: \$61.60.

Teacher: \$61.60? Okay, so what's your discount, "student"? What percent?

Student: [crosstalk 00:19:37].

Teacher: Okay, so put that in the ... Your food total goes here. \$61.60.

Student: Wait, so can we just times it?

Teacher: Yeah, you can times it.

Student: Where's the calculator thing-y?

Teacher: How do you find the discount, "student"?

Student: Times?

Teacher: Times what?

Student: [00:20:00] \$61.60 times \$10.10?

Teacher: Okay, good.

Student: Wait, then you add our both-

Teacher: Ask "student". See if she knows before you ask me. Yours? Or "student's"?

Student: It's mine.

Teacher: Okay. Make sure "student" gets the same thing now.

Student: Wait, wait.

Student: Darn it!

Teacher: Right now your food it \$68.60?

Student: Yep.

Teacher: Okay, and your discount is 25%. Good discount!

Student: He's blaming me.

Student: Do we need to add both of our food totals together?

Teacher: Yes.

Student: On the same paper?

Teacher: Yes.

Student: We each have a paper, so what do we do?

Teacher: [inaudible 00:20:47]. All right, so you go your ... Where's your food total? You need to erase all this. This is your food total? Okay, and where's your food total? This?

Student: Yeah.

Teacher: Okay, so you're going to put your \$25.55 with your \$24.65. That's your food total because it's combined together.

Student: Oh, so we only do it on one paper.

Teacher: No, he does his here and you do yours ... Over here, now you're going to put "plus \$24.65."

Student: Oh, then I got to erase that [crosstalk 00:21:20].

Teacher: Yeah. You just want a new paper?

Student: Yeah.

Teacher: Okay. Yes, yes. Yes.

Student: Do we have to switch these?

Teacher: Hold on. Here you go. All right, pencils down, eyes up here. Pencils down, eyes up here.

Student: Never go [inaudible 00:21:51] with "student".

Teacher: Is he going crazy? Buying a whole bunch of stuff?

Student: No, he just ... He's a-

Teacher: Okay. I guess I didn't [00:22:00] explain it well enough. I'm getting a lot of the same questions. Your paper should have both of your food totals on it. Okay? It's not "student" does his own and then Daniel does his own, okay? You want both of your food on one paper. Where it says "food total," is that just "student's" food? No, it's "student's" and Daniel's food, where it says "food total."

Student: It's your orders combined.

Teacher: Your order is combined. Your sitting at the same table, you server is making one check for the two of you. It's not "student" does his own thing, Daniel does his own thing. Once Daniel gets his total he can give it to "student" and he puts it on his paper, or you can do the whole thing together.

Student: Cool.

Teacher: Okay? I got asked that four times, so I guess I didn't explain it well enough. Does that make sense now? You're good. Do you each do your own discount? No.

Student: We have the same discount.

Teacher: You have the same discount. You should end up with the same answers because you're using the same totals. All right, go.

Student: I have a question. Your tax ...

Teacher: Yes.

Student: Do we multiply it by the subtotal?

Teacher: What do you think?

Student: You multiply ... Wait, tax. Yeah, I think you multiply it by the same total?

Teacher: This subtotal means the what?

Student: The one after you get the discount.

Teacher: Right, so is your tax on the discount or was your tax before the discount?

Student: Tax is after.

Teacher: Correct.

Student: Wait, but do we still need to multiply the zero?

Teacher: Yeah.



Student: Okay.

Teacher: Or else it would be 40%, and you wouldn't want to pay 40% tax.

Student: But it's just going to be all zeros.

Teacher: Oh, I see what you're saying. Yeah, as long as you count the decimals, you'll be fine. Or you could use this, because I know "student" will. You can do that, [00:24:00] and "student" can do that, and you can double check each other.

Student: Wait, can we work on our next order?

Teacher: Yeah, totally. You have to order something different, though.

Student: Okay.

Teacher: What are you going to get? Shrimp this time?

Student: Ravioli.

Teacher: Oh, okay. Branching out? Trying something new?

Student: When I'm at Spaghetti Factory, I do the same thing.

Teacher: You guys didn't write any sentences. You're welcome. Don't forget to do that: the highlighted part. When you think you're done, before moving on, make sure you do that.

Student: Then you're going to multiply that by .25.

Teacher: So this is your total, and you guys got a %25 off? Lucky.

Student: Yeah.

Teacher: Kaylie, what do you do once you figure out your 25%? It's a discount, what do you do with it?

Student: A discount, you subtract it to-

Teacher: You subtract it, good.

Student: Mrs. , [inaudible 00:25:21] discounts, so I just did that.

Teacher: Oh, smart. How much tip would you leave, then?

Student: \$0.60.

Teacher: \$0.60? You'd leave \$0.60?

Student: No, oh, wait, wait! That's right.

Student: Oh my god, "student".

Student: Oops, oops, oops, \$6.00, \$7.00.

Student: Okay. No, no, no, so write that there. That's your tip, right, is \$6.16? But then you're going to say, "I would leave ..." What would you leave?

Student: "I would [00:26:00] leave \$7.00, because ..."

Teacher: Okay, good. All right, did you guys get it figured out? The question you had?

Student: Yeah.

Teacher: Okay.

Student: Just say the service was good.

Student: Do they actually do the math in restaurants or do they see how it comes out?

Teacher: For the tax, they do the ... Well, usually the machine does it for them.

Student: Oh, because I don't want to do this when I grow up.

Teacher: Usually you should always check your bill, because [inaudible 00:26:41] to make mistakes, right?

Student: \$5.70 ... Wait, Mrs. , do we put an eight right here?

Teacher: Ask "student" what she thinks. What is your question? Ask her.

Student: Do you put an eight right there?

Student: Is it more than six or more than five?

Student: Five.

Student: So yeah.

Student: \$5.78.

Teacher: Okay, so what would you leave?

Student: Subtotal is how much everything is, right?

Teacher: This is with your discount, so this minus your discount is your subtotal. You know your food total? Where's your discount? Is it this? That, right?

Student: Yeah.

Teacher: So \$17.82 goes there and the \$53.00 goes there.

Student: So \$63.54, that's what we're paying.

Teacher: Right, but this is your tip amount?

Student: Yeah.

Teacher: So that goes there.

Student: Oh, we have to put that there.

Student: [inaudible 00:27:58].

Teacher: No, nope.

Student: No, "student", just separately, right?

Teacher: [00:28:00] Yeah, because it's separate. One is for your server, and one is for the restaurant, right?

Student: Okay.

Student: Your tax is basically your subtotal, right?

Teacher: Yes. How did you get your subtotal, though?

Student: I'm going to do the work now.

Teacher: No, but how did you do it?

Student: Minus \$10[crosstalk 00:28:30].

Teacher: Minus your discount, good. This tax is based on this subtotal?

Student: I'm guessing so.

Teacher: You're guessing so?

Student: No, it is. It is.

Teacher: It is?

Student: Yeah.

Teacher: Okay, so you went 7% tax on this or 7% tax on this one?

Student: Oh yeah, I put \$5.00.

Teacher: You wish it was \$5.90 instead of \$15.90.

Student: Wait, I [crosstalk 00:29:09].

Student: Well, because I don't know what I want!

Student: I already picked mine again and I got more than last time.

Teacher: Oh, you didn't just get a salad.

Student: No.

Teacher: Okay, good job.

Student: I thought you said you can't get just salad.

Teacher: Yeah, get something different. What did you end up getting?

Student: I got that.

Teacher: Ravioli?

Student: I got that, I got that, and I got that.

Teacher: Okay, that should put a little ... Maybe you'll come out of their weighing 70 pounds now. You're still under the weight for Peewees, so you're fine. [00:30:00] You're definitely not going to be on the line at 70 pounds.

Student: That's the good part.

Teacher: True. Who wants to be on the line?

Student: I want to.

Teacher: "student" does.

Student: Oh my god! You messed it up!

Student: No, I didn't! It doesn't even matter!

Teacher: You're writing your sentences? Okay, good. How you guys doing?

Student: Good.

Teacher: Okay, so ... You got \$0.70 off of your food. 25% off, okay, let's see if this makes sense. Your food costs about \$40.00, right? If we rounded it off, it's \$40.00. You're getting 25% off.

Student: Oh, that's \$25.00?

Teacher: No, it's \$0.25 for every \$1.00, so how do we find 25% off of something.

Student: \$4.00?

Teacher: How did you get \$4.00? Because you're thinking 25 is one fourth? Okay, so how would you find one fourth of that amount?

Student: Of \$1.00?

Teacher: Well, of that, your \$39.80.

Student: Divide by [inaudible 00:31:16].

Teacher: No, we haven't been dividing. What have we been doing to find percent of something?

Student: Dividing, wait ... Fractions?

Student: 25 over 100, and then ...

Teacher: 25 over 100, okay, that works. Is this the is or the of? Is this the part or the whole?

Student: Part.

Student: It's the whole. Oh, wait.

Teacher: Is this the 25% or is that the whole amount of the food.

Student: That's the whole amount of the food.

Student: The whole.

Teacher: Yeah, so where does that go?

Student: On the top.

Student: Whole goes on the bottom.

Teacher: The whole goes on the top? The whole goes on the bottom, okay. If you were to write that ... You said 25 over 100 ...

Student: [00:32:00] The number can't have a decimal under it, right?

Teacher: It can. It's fine. ... equals. Then this would go on the bottom, you said. Now how did we get this number up here? What do we do?

Student: Multiply the ...

Teacher: When you have a missing number in a proportion, what would we do, Daniel? What were we doing yesterday?

Student: We cross-multiply?

Teacher: Yes, cross-multiply. You would go this times this.

Student: 35 times 30 [crosstalk 00:32:37].

Teacher: Hey, how come he has \$39.80 and you have \$39.72?

Student: [inaudible 00:32:42]

Teacher: No, right here, look. \$39.72. How can you have \$39.80?

Student: Oh.

Teacher: No wonder. You have this right here. This is actually \$39.72 right here. Did you do \$39.72 times 25? Yeah? Okay, so write-

Student: I got 92.

Teacher: Okay, so write that over there. \$39.72 times 25. 993. Then what do you do? There's a third number, what do you do with that third number?

Student: Divide it.

Student: Divide it by 100 equals \$9.93.

Teacher: 9 point ... so what is that number right there? \$9.93. That goes here, percent, that goes here. \$9.93, that's your percent discount. Not \$0.07! That's a wimpy discount. So you get a discount of \$9.93. What do you do with that amount?

Student: Subtract it.

Teacher: Subtract it, good. What are you [00:34:00] subtracting it from?

Student: I'm going to use this. [inaudible 00:34:06].

Teacher: Correct.

Student: [inaudible 00:34:07] and then subtotal minus ... we minus it. [inaudible 00:34:23]

Teacher: So where is it? \$39.72 minus \$9.93. Right?

Student: We got \$39.80 because that was after the total from adding decimals.

Teacher: Then how come you had \$39.72?

Student: Oh, that was from adding all these.

Teacher: Okay, wait. You're saying your food was \$28.90 and your food was \$18- you guys only ordered one thing each and it came to \$39.80? Or \$39.72?

Student: \$39.80.

Teacher: Okay, so you were right.

Student: I thought it was a computation error.

Teacher: Okay, so this is actually \$39.80 over here. Erase all of that. Erase the whole thing. Okay, so you're going to do the same thing you just did, except, what goes over here, instead of \$39.72?

Student: Oh, \$39.80.

Teacher: Yeah, because it actually was \$39.80. Done? You got your sentences?

Student: Yeah.

Teacher: You got your-

Student: ... tax by the subtotal or the food total?

Teacher: "student", does the tax get times by the [00:36:00] subtotal or the one with the discount?

Student: The one with the discount.

Teacher: The one with the discount. Why didn't you ask "student"? She's right there.

Student: She never told me.

Student: I told him, but I said, "Don't trust me."

Teacher: Oh, okay, but when I asked you and you told me, you sounded confident.

Student: [crosstalk 00:36:14]

Teacher: Oh, you don't trust her? No, she's right. ... but she's doing.

Student: I don't know what I'm going.

Teacher: Okay, help her out, Rave, come on.

Student: She doesn't even her discount yet.

Teacher: Why do you guys have two sets?

Student: Because we did two.

Teacher: Where's your other bag? Oh, nevermind. I see what you're saying, that's all together.

Student: Yeah.

Teacher: Got it. You need to help to her. Come one, that's why I put you with her.

Student: What does that mean?

Teacher: Because I know that you know what you're doing, so you can help her out?

Student: I do?

Teacher: Yes. How's it going?

Student: Good.

Teacher: Yeah?

Student: I had to redo this one because I multiplied wrong a few times.

Teacher: You multiplied wrong finding the what? The tax?

Student: Tax.



Teacher: What did you do?

Student: I put .4 instead of .04.

Teacher: Okay, so when you multiply by .4, what is that actually finding? What percent?

Student: What?

Teacher: Is that finding 4%?

Student: No, it's finding 40%.

Teacher: 40%, so were you like, " Oh, that's kind of a lot of tax." What made you realize that was wrong?

Student: Well, I got .4 tax on this and I did it again and then just said, " Shouldn't it be .04?" I put .4 up here, so now [crosstalk 00:37:40].

Teacher: Okay, so when you did it the second way, Kristen caught that and you knew you had to go back and fix the first one.

Student: Yeah.

Teacher: Okay, good catch. Good catch. Yeah, 40% would be a better discount, not a tax. Yeah. Okay. All right, good team work. You got the same answers now?

Student: I think so.

Teacher: You think so? [00:38:00] So the tip actually came out to exactly \$3.00? Oh, it's right here.

Student: No, it was \$3.08.

Teacher: Oh, okay, I got it, I got it, I got it. Okay. Don't forget your sentences now. How are you doing?

Student: Kind of good.

Teacher: Kind of good?

Student: We're doing totally fine!

Teacher: You're doing totally fine?

Student: He's making me pay.

Teacher: He's making you pay?

Student: Yes.

Teacher: You know he has fewer Blazer Bucks than you do, right? He always asks to pay to go to the bathroom.

Student: [inaudible 00:38:33]

Teacher: He couldn't wait seven minutes, he had to go. Pay five.

Student: [inaudible 00:38:39]

Teacher: Just now. Okay, did we get it? Did you get it? Right here? What was it? What is it, \$9.95? \$9.95 is the discount.

Student: [inaudible 00:38:55]

Teacher: Then you subtracted it, right?

Student: Yeah.

Teacher: Okay, then how do you find your tax? How do you find tax? What do you do? You subtracted, right?

Student: [inaudible 00:39:04] right there.

Teacher: Okay, so actually put your \$29.85 over here, because that's your subtotal. What was your discount? \$9.95, so this is \$9.95. Okay, so how do you find ... What is it? What tax did you guys pick?

Student: [inaudible 00:39:20]

Teacher: Okay, so how do you find 7% tax? What do you do?

Student: We already did.

Teacher: Oh, okay. Wait, how did you find your tax? You didn't do it.

Student: I did it here.

Teacher: Oh, okay. 7 over 100 off of \$29.85. Good. What do you do with tax, though?

Student: You add it.

Teacher: You add it, right. It's not ... It came out to \$2.08 over here. Check. [00:40:00] Do \$29.85, and you said you add the tax?

Student: I'd rather pay this than pay the books.

Teacher: Yeah.

Student: Do I just put [crosstalk 00:40:12]?

Teacher: Do you have your sentences?

Student: Yeah.

Teacher: Yeah? Plus the \$2.08. So, \$31.93, is that what you got, Daniel? Okay. Now erase that.

Student: Do we put this in our folder?

Teacher: No, I'm going to collect it. That's your ticket out the door. Make sure your name's on it, girlfriend.

Student: Considering it's Assaggio's, [inaudible 00:40:49] are minor.

Teacher: Okay, so now you want 10% tip off of what amount?

Student: The total.

Teacher: The total, but this is with the discount, though. You usually do tip off of the original amount, so this. You want 10% of this. Question or stretching?

Student: [inaudible 00:41:15]

Teacher: Okay. All right, pencils down, eyes over here. Okay, I need you to ... That is your ticket out the door, so I want to see what you have done. Some of you only got one of them done, some of you got two and a half done.

Student: Two and a half?

Teacher: Yeah, they started on a third one. The four of them had a girls' night out. Movie after.

Student: We're all broke. [inaudible 00:41:50]

Teacher: That's right. You better just talk plenty at the restaurant, because-

Student: And cheese.

Teacher: Yeah, maybe. That cheese is expensive, too, though. Don't put [00:42:00] fruit. Fruit's expensive. Okay. Your tickets can go back inside of the baggies, please. The menu. I actually don't want you to leave the menu there, because everyone just looks at the menu and doesn't pay attention to me. You know it's true. That's why I didn't give it to you guys right away. Out the door you can give me your menu and your worksheet. Who thinks, "I could do this," "Maybe," or, "Yeah, my mom's all on her own, I can't do this." So when you go to, let's say you go to Assaggio's-

Teacher: "student", what about you, bud? Yes, you could do it? Most of you could do it. Some of you- Did you put the menu over there?

Student: Yeah.

Teacher: Okay. If you want to drop the menu off at the front, that's fine.