**Tamara fractions to percents**

Tamara: So someone different should answer now. Four-fifths; how do you get four-fifths as a percent? Four-fifths as a percent? Douglas?

Student: You get 4/5 – first you write down the fraction 4/5 and you put a times and then you put another fraction line and an equal then you put another fraction line and 100. Then five times 20 equals 100, then four times 20 equals 80 so it’s 80 percent.

Tamara: So it’s 80 percent. Did anyone 80 percent in a different way than Douglas did? In a different way Marque? You didn’t hear him?

Student: Did he use the magic one?

Tamara: Yes, he used the magic one.

Student: Okay, I have a different way.

Tamara: So you did it the same way? Caleb?

Student: I think if you do 20 times five –

Tamara: I’m sorry Caleb; Keeshan please stop talking. Continue Caleb.

Student: If you take 20 times five it will give you 100, then if you do four times five it gives you 80, and 80 will be the denominator.

Tamara: 80 won’t be the denominator. What will 80 be? If 80’s on the top of the fraction, what will it be?

Student: The numerator.

Tamara: The numerator, thank you. So he found it – he just used it in his head, he thought, “How do I get from five to make it out of 100. He multiplied by 20 in his head and did the same thing to the top. So 9/20. How do you get 9/20 as a percent? 9/20 as a percent. Are Darius and Douglas the only ones who know?

Student: Say it again.

Tamara: 9/20 as a percent. Marque?

Student: The answer is 25 percent, and how you get it is you divide by 5, 9/5 equals 45 over 100 and out of 100 is 40, so 40 percent.

Tamara: So it’s 40 percent? You said you multiplied it by five –

Student: 45.

Tamara: 45 percent, thank you. And then the next one, 10/50. What is 10/50 as a percent? Most of you should know this one, so let’s whisper the level at voice level one. What is 10/50 as a percent? On the count of three whisper it. One, two, three.

Student: 20 percent.

Tamara: 20 percent. I heard someone say 50, but how did you get 50 as a percent? Amai? How did you get 50 as a percent?

Student: I didn’t mean to say that, I’m sorry.

Tamara: Okay, can you explain to us then why is it 20 percent? No?

Student: I didn’t do it.

Tamara: Can you do it right now? We’re going to move on to 12/25, and then Amai is going to explain to us how 10 out of 50 equals 20 percent. Who knows 12/25? 12/25 is a percent?

Student: 40.

Tamara: Percent. That means out of 100 right?

Student: I can’t get it.

Tamara: So we are waiting. Darius, you already shared today. John?

Student: I almost have – is it 65 percent?

Tamara: No, you’re right that it’s almost half, but if you go through the steps to actually figure it out, you’ll see that it’s not 65 percent. So if you write it down, if you have a piece of notebook paper John so you can do the work. But that was a good estimate, a guess, knowing it’s close to half. We need to figure out exactly what it is because we can do that here.

Student: What was that – you said 25, or you said 20?

Tamara: What do you think? Figure it out and then you tell me the answer.

Student: Tell me what everyone else said.

Tamara: Well, you don’t need to know what everyone else said, you can figure out the answer.

Student: Because, that’s what I’m trying to do.

Tamara: Well think about it. You need to make out of 100 please Amai, and then you’ll see. Yes John?

Student: How do you convert a fraction into a percent?

Tamara: Who can answer that for John? How do we convert a fraction to a percent? Tell John how. Douglas?

Student: First you have to write your fraction and then you have to write another line – first you write your fraction then you write a times table by, then you write a line and write equal line to another line. Then you add 100, and whatever that bottom is equals to 100 you write at the top, and then that number at the top times that number gives you the answer.

Tamara: So in other words, to summarize what Douglas just said, you have your original fraction, and you need a magic one to get it to be out of 100. That’s exactly what Douglas said, but Douglas gave you step by step by step. So now do you know the answer John?

Student: Yes. 48 percent.

Tamara: 48 percent. So how did you 48 percent to describe to the rest of the class?

Student: Because what Douglas said, you have to do your fraction 12/25 and then make a times table sign, then make another line and equals out of 100. Then I went to 25 and said 25 times what equals 100, and 25 times four, so you bring the four to the top and 12 times four equals 48.

Tamara: Yes, that’s exactly right John, thank you. So back to Amai then. Amai is going to figure out 10/50 as a percent. Did you figure it out yet?

Student: No.

Tamara: Alright, we’ll come back to you. You need to figure that out. Keeshan, you can help her please. Help her figure out 10/50 as a percent. Boys and girls, we moved on to the mini lesson. There should be no talk unless you raised your hand like Christian is doing right now.

Student: Can I use the restroom?

Tamara: Okay, hold on. Yes, you may. So we have then 6/10 as a percent. Yes Terrence?

Student: 6/10 –

Tamara: I’m sorry Terrence, your classmates –

Student: Is 60 percent.

Tamara: 60 percent. And Christian just mentioned that she forgot how to do this, so tell me what I need to do. If I have 6/10, how do I make this equal to a percent? Who can help me out? If I forgot how to do this, how would you remind me what to do? Darius?

Student: Put your fraction –

Tamara: Yup, it’s here, I wrote it.

Student: Okay, put times.

Tamara: Christian, up here. Yes Darius.

Student: Put times.

Tamara: Okay.

Student: A line.

Tamara: So what is that line for? Why am I putting a line?

Student: For the magic one.

Tamara: And what’s the magic one going to give me?

Student: 10.

Tamara: The magic one’s going to give me 10?

Student: The magic one’s going to give you 100.

Tamara: So hold on, I think I hear private. Can we ask Marque?

Student: It’ll give you an equivalent fraction.

Tamara: Using that magic one will give me an equivalent fraction, okay? So thank you for reminding me.

Student: Okay, and then you put another line and under the other line put 100.

Tamara: Okay.

Student: 100.

Tamara: So this 100, why am I putting it at 100? Why don't I put 20 or something?

Student: Because if you put 20 it won’t be right.

Tamara: Why not?

Student: Because the magic one used times by is going to equal to 100, but if you put 20, the magic one won’t be right.

Tamara: But why do I want it to be 100 is my question. Why do I want the new denominator to be 100? Can Terrence help you out? Do you mind? Terrence?

Student: You need to get 100 because a percent is out of 100.

Tamara: Because a percent is out of 100. Did you all have the same answer, Caleb, Douglas, and John?

Student: Yes.

Tamara: Exactly. So now Christian – Darius, can you finish telling me what to do? Now, we set up the problem – this is the set up. You set up your problem, then you can finish figuring out your question. So for all of them – Okay Christian, you have it? Can Christian finish explaining it? Alright Christian. Hold on Caleb. You get it because you did the other ones.

Student: You need to figure out what times 10 equals 100.

Tamara: Okay, and what is it? What do you multiply by 10 to get 100?

Student: Ten.

Tamara: Ten. So now that ten’s on my denominator of my magic one. What needs to go on top Christian?

Student: Ten.

Tamara: Ten. And what is six times ten Christian?

Student: 60.

Tamara: 60. So how many do I have out of 100?

Student: 60.

Tamara: 60 out of 100. So what is my answer? 6/10 as percent?

Student: Huh?

Tamara: What is 6/10 as a percent?

Student: Oh.

Tamara: Now that we did all this work?

Student: 60.

Tamara: 60 percent, and thank you for making the sign with your hand. 60 percent. Okay? And the last one, let’s go over the last question – did you have a question Amai?

Student: She already got it.

Tamara: Oh, you have yours. Thank you for reminding me. So what’s the answer to Amai’s 12/25? Or was it 10/50?

Student: Do you want me to go over the steps?

Tamara: You can just tell me the answer, because that is a review.

Student: I did 50 percent.

Tamara: 10/50 is 50 percent?

Student: Because –

Tamara: Tell me what you did.

Student: 10 over 50, you multiply 10/50 by 50/50 and –

Tamara: So you say 50 times 50 is 100? I know that in another operation you put two 50’s together –

Student: Oh, 50 times ten.

Tamara: 50 times ten is 100?

Student: No.

Tamara: So what do you mean? Shanara face forward, Christian face forward. What do you do to get 50 and 50 to be 100? What operation did you do to get 50 and 50 as 100?

Student: Because I counted by five.

Tamara: No. What did you do originally? How do we make 50 and 50 equal to 100? If you multiply –

Student: I added.

Tamara: You would add it, exactly. You don’t want to add, you want to multiply something by 50 to get 100. So how many 50’s do you need to get 100? That’s what you’re going to multiply by. So how many 50’s do you need to get 100?

Student: Ten?

Tamara: No.

Student: 50?

Tamara: How many times did you mistakenly add 50? How many times did you add 50 together?

Student: 10.

Tamara: No, we did not do it by 10. Because what you said – you said 50 and 50 is 100. How many 50’s is in that statement?

Student: Two.

Tamara: Two. So 50 times what is 100?

Student: 50 times what is 100? 50?

Tamara: 50 times two. 50 times two. Okay? Try to multiply that out and figure out that 50 times two is 100 okay Amai? And what we’re going to do is during the guided practice I’m going to come back to you to make sure you can do that.

Student: I know.

Tamara: Amai can do it. It’s getting too loud.