

Name of Student: Student#3

Name of Teacher Conducting One on One Conference:Ms. Sandra Pozzobon

Date: May 11th 2011

Purpose of Diagnostic Task: To find out which strategies students use to solve addition, subtraction and multiplication problems mentally.



Ms.Sandra: Hi!

Student#3: Hi!

Ms.Sandra: It's May 11th 2011. I am going to ask you some questions. What I would like you to do is try to figure out how to solve the problem and then you'll explain to me how you solved it.

Ms.Sandra reads Word Problem #1.

Student#3: 55.

Ms.Sandra: Okay and how did you get the answer?

Student#3: I first did 30 plus 20 and that is 50 and then I did 50 plus 5 and that is 55.

Analysis of Word Problem#1: Student#3 demonstrates an understanding of place value. He correctly uses addition to mentally solve the word problem. He seems very confident in his answer.

Ms.Sandra reads Word Problem#2 and clarifies any misunderstanding of the meaning of words in the word problem. Student#3 thinks about the answer silently.

Student#3: 42.

Ms.Sandra: Okay and how did you get that?

Student#3: I first did 24 plus 10 is 34 and then plus 8 is 42.

Analysis of Word Problem #2: Student#3 is able to mentally solve this word problem. His ability to partition numbers (he breaks up the number 18 into 10 and 8 as 10 is a more flexible number when adding) helps him to easily solve the problem. He seems confident in his answer.

Ms.Sandra reads Word Problem #3 and clarifies the word 'loaf' in the word problem. Ivo silently thinks about the answer.

Student#3: 90.

Ms.Sandra: Okay and how did you get that?

Student#3: Ummm... I did because 20 times 5 is 100 and then minus 10 because it's only 18 times and then it's 90.

Analysis of Word Problem#3: **Student#3** correctly uses the strategy of multiplication to mentally solve this word problem. He uses the strategy of working with the number 20 (which is an easier and faster number to multiply with then 80) and then subtracts the difference (20) to successfully calculate his answer.

Ms.Sandra reads Word Problem #4. Student#3 silently thinks to himself.

Student#3: 63.

Ms. Sandra: Okay and how did you get the answer?

Student#3: I did 100 minus 30, that is 70 and then minus 7, that is 63.

Analysis of Word Problem#4: **Student#3** correctly uses subtraction to mentally solve this problem. He uses the strategy of working first with an even number (30) and then subtracting the remainder to calculate his answer. He demonstrates confidence in his calculations.

Ms. Sandra reads Word Problem#5.

Student#3:50

Ms.Sandra: Okay and how did you get this answer?

Student#3: Because 65-15 is... is 50 and so because they have already travelled 15 and it's 65 you have to take minus 15.

Analysis of Word Problem#5: **Student#3** correctly uses subtraction to mentally solve this problem. He seems confident in his strategy and answer.

Ms.Sandra reads Word Problem#6 and clarifies the word 'notes' to Student#3 to ensure he understands the word problem.

Student#3: 12

Ms.Sandra: Okay and how did you get that answer?

Student#3: I did because in one hundred dollars there has to be 10 of these Euro notes and then you have 12.

Analysis of Word Problem#6: **Student#3** seems to mentally know that 120 divided by 10 is 12. He seems very confident in his answer.