

Math Diary-20/5/2022

On 20th May 2022, I taught my 2nd Math Circle Session as a student of [Cheenta](#). This was my second math circle session with sadly only one student. The student who attended it was a 4th Grader from [Swapnopuran Welfare Society \(SWS\)](#) school. We discussed five problems in one hour.

This was the first problem:

Problem 2:

Five friends, Ann, Bob, Cal, Dean, and Eva, shook hands with each other. Each person shook hands with every other person once. How many handshakes occurred?

It was an easy problem and she was able to understand it. She asked why Eva didn't shake hands with everyone once her turn came and then recall that only once can Eva shake hands with the others which was already done. It took us about 5 minutes to solve this problem and we moved on to the next problem.

This was the second problem:

Problem 8:

Meena has less cats than Ridha who has more dogs than Lata. Lata has more cats than Ridha, and more dogs than Meena. Meena has more dogs than Ridha. Which of the following statements are true?

- A. Lata has the least number of pets.
- B. Meena has less cats than Ridha.
- C. Lata has the least number of dogs.
- D. Ridha has the least number of dogs.

It took me a while to explain and her some time to understand the problem. I wrote down the statements in a simpler version for her to understand. She was pretty messed up and by the look of it was guessing randomly until the correct answer was only left.

This is the next problem:

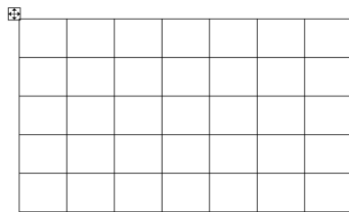
Problem 7:

If we multiply the number of squares on one side and the bottom of the rectangle then we get the the number of boxes in it:

3						
2						
1	2	3	4	5	6	

NUMBER OF BOXES INSIDE IS 18.

Find out the number of squares in this rectangle:



- a) 12
- b) 7
- c) 35
- d) 40

I had thought that she would not know about the method of multiplying the number of sides and bottom, but she knew it! She solved this in around 2 minutes.

The fourth problem was:

Four Ice Cream Flavors. Ann can put two scoops of ice cream in her cone side-by-side:



She must select two distinct flavors out of vanilla, chocolate, pistachio, and strawberry. How many different ice-cream cones can she make?

I struggled explaining this problem and it took her time to solve it. She asked why we can't take 2 scoops of the same flavor and I told her that it was the rule. She told me she liked it the best.

The next and last problem is:

Dr. Ashani Dasgupta wants to have some fruits. he saw there are 1 apple , 1 orange, 1 banana, 1 pineapple, 1 mango in fridge. He wants to have exactly two fruits but doesn't want to start with apple. How many choices he has?

- a. 14
- b. 19
- c. 16
- d. 10
- e. 20

We solved this problem easily in 5 minutes. We drew a mind chart showing the possibilities of the fruit. She said she liked it but not as much as the previous one.

I enjoyed teaching her today. Both I and she enjoyed the session and its problems! Solving them with her was so much fun and enjoyable! I enjoyed them for they were easy to explain and fun and she for she said so. Solving them with her was so fun.