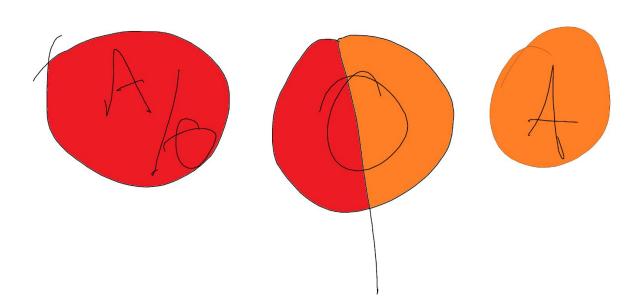
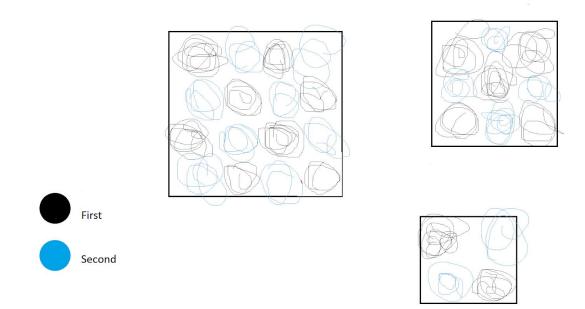
- 1. If the alien and I speak the same language then that means that he either already understands the difference between left and right (to know/be able to speak a language you need to be able to comprehend its words) or he at least has terminology in his own language to represent the two. No explanation needed.
- 2. There are a lot of sources available outside of the internet that would allow me to figure out the total number of gas stations in the world. There are local and state directories, maps, and phone books that I assume would all list register gas stations. If I were to attempt to find the total number I would probably use those sources. And to total the entire world, I would attempt to do the same thing in other countries, learning languages or finding translators so that I could effectively use each source.
- 3. If I know that all the baskets are mismarked then that means whatever fruit is in the apples and oranges basket is the only fruit in that basket. So, for example, if I ask for a fruit from the a/o basket and pull out an apple, I know that it is really the apple basket because it can't be the a/o basket. So now I just have the mismarked a/o basket and orange basket. I know that the basket labeled oranges can't be apples because I already found that basket, and it can't be oranges because all of the baskets are mislabeled. So the basket labeled oranges has to actually be the a/o basket; making the basket labeled apples the orange basket.



I used this picture as a visual aid.

4. It depends on the size of the table and if it can accommodate an even or odd number of coins. If the table can hold an even number of coins then the grandpa will tell Dylan to go second. If he goes second on a table that can accommodate an even number of coins then he will always be the last person to find a spot for his coin. The exact opposite is true for tables that can accommodate an odd number. The first to set down a coin on an

odd table will always find the last coin spot.



- 5. First I figured out that the number of coins has to be a multiple of 11 because there were no remaining coins with only 11 pirates. Now I need to find a number that is a multiple of 11, that is also divisible by 12 with a remainder of 5, and divisible by 13 with a remainder of 3. The only way that I can think to find that number is to guess and check every multiple of 11 up to 1000. 341! It's 341. I didn't have to go all the way up to 1000.
- 6. We've been using it to create folders, documents, and directories on our commuters and that's useful. You can use it to create apps and build/design websites. It can be used to program robots. It can be used to trigger muscle receptors and send secret messages through your hands. A good algorithm can be used to replace human labor.
- 7. Good code is code that runs smoothly. It needs to be useful and, ideally, simple so that there is motivation to replicate it and doing so is easy to do. Good code can be useful for long periods of time. It can be edited easily so that it can continue to improve. It is versatile and flexible.
- 8. I took a single semester course coding in Csharp but I dropped that class at the end of the semester.