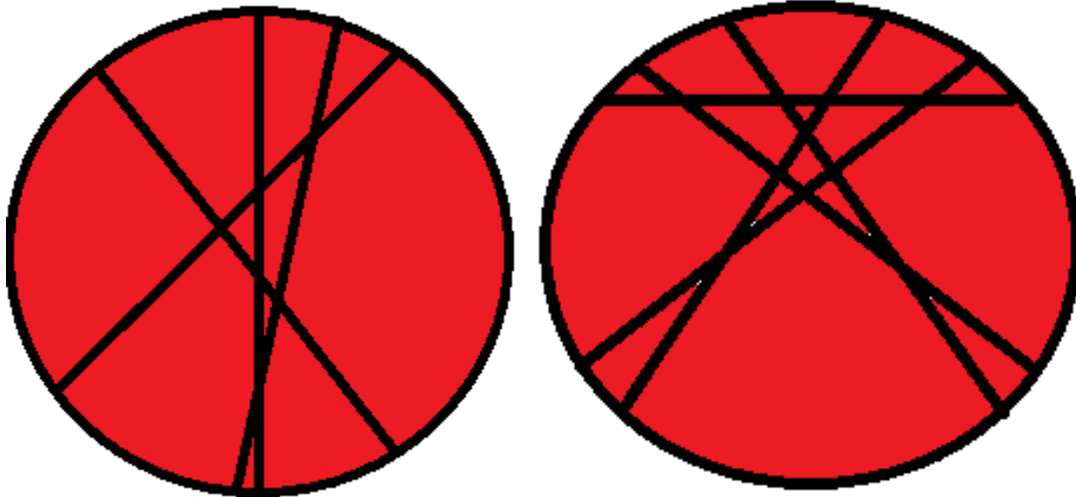
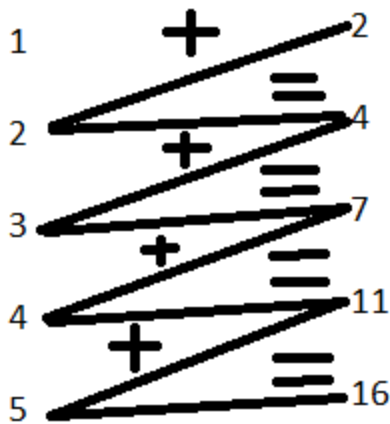


In this POW we were asked to take a pie and cut it up in as many pieces as we can, but only using 4 and five lines using only straight lines. The lines don't have to go through the center of the circle. The question asks "what is the largest number of pieces that can be produced from a given number of cuts."



Starting off on the problem I was a little confused on what we were supposed to be doing on the problem. I asked a classmate what we were doing so he showed me an example. I started off by seeing a pattern in the little chart. It says if you cut the circle with 1 cut you get two pieces, if you get 2 cuts you have 4 pieces, if you cut it in 3 pieces you get 7, and so on.



As you can see if you add 2 and 2 together you get 4 if you add 4 and 3 you get 7 and if you add 7 and 4 you get 11, if you add 11 and 5 you get 16, and so on. I actually wasn't looking for a pattern when I found this. I then knew what the most number of cuts could be so I cut the pie till I found them. I found both of the problems in my second try so I was proud of that. The answer for 4 is 11 and the answer for 5 is 16.

For my extension I wanted to know how many pieces 10 can have I found out that it is 50.

I really liked this POW because I got it really quick, unlike some of the other POWs that we have done in the past. I think that it was worthwhile because it was fun and I learned new things, even though I might never use it ever again. I think that this POW was easy for me but for some other students were having trouble. On a scale of 1-25 I think I would give myself a 20 because I got the right answers and answered all the question but could have been done in a more professional way.