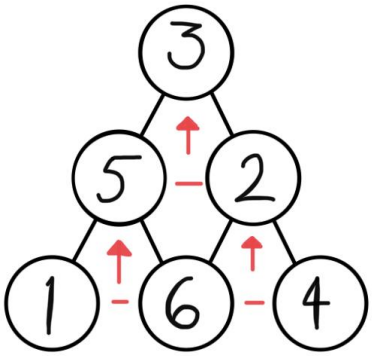
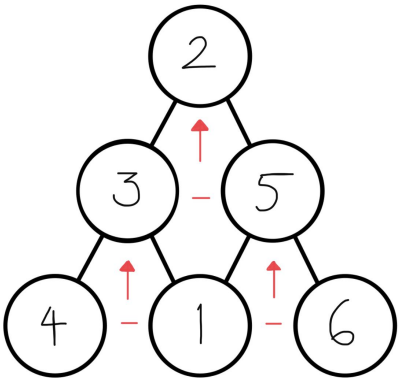
My maths submission

I believe that we can fill out the circles with numbers 1-6, with each number being used exactly once.
I think that there are three ways in which we can fill this out:

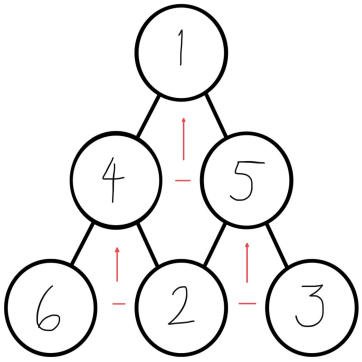
First way:



Second way:

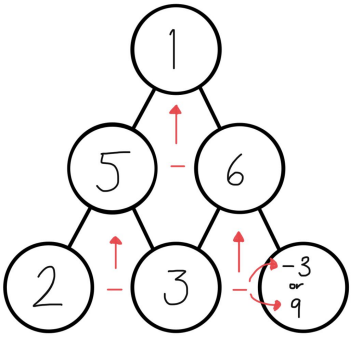


Third way:



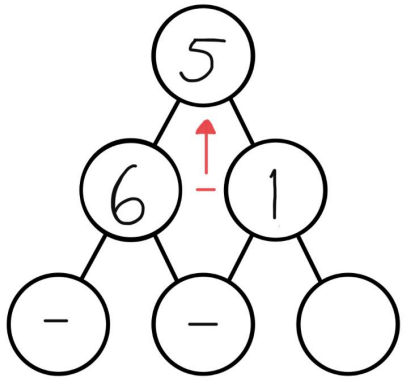
Now to address the other questions.

Why must 6 be at the bottom?
The number 6 must be at the bottom since the range of the numbers 1-6 is 5. It can't be any higher than that. If we did, however, try to put it somewhere else we wouldn't be able to use numbers within the range of 1-6.



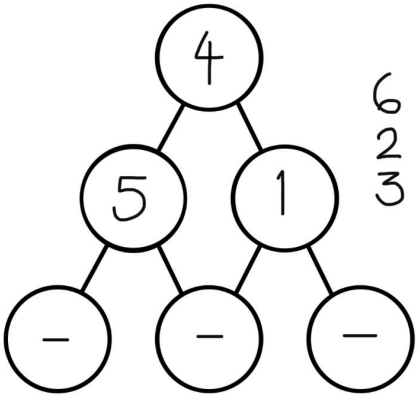
In this example I have put 6 in the middle and have 3 in one of the two circles connecting it below. I have only two options to use and that is 9 and -3 which both don't satisfy the 1-6 range.
This is why we have to put 6 at the bottom only.

Why can't we have 5 at the top?



Let's say that we did put 5 at the top, the only two numbers within the 1-6 range we can use are 1 and 6. However, we have already addressed the problem with having 6 anywhere but the bottom which is why we can't have 5 at the top.

Why can't we have 4 at the top?



If we put 4 at the top, there are two options as to what two numbers we put beneath. Once option was 6 and 4, but after addressing why we can't have 6 anywhere but the bottom, I had to eliminate that option. The second option was to use 5 and 1. If we use that we are left with three numbers: 6, 2 and 3. They don't comply with the triangle no matter what pattern they are put in. This is why we can't have 4 at the top.