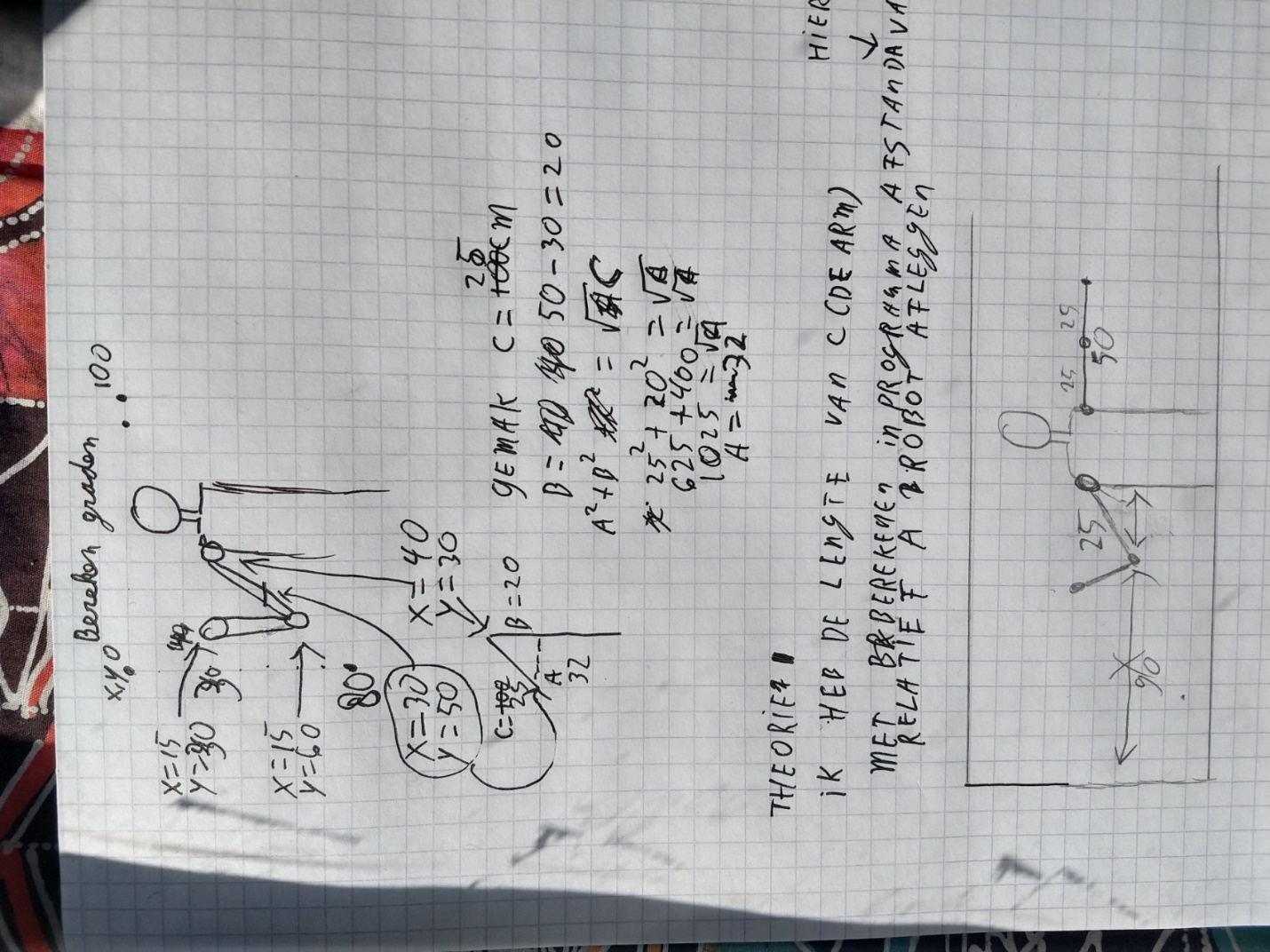
Maths for this project

This document is to record my thought process regarding mathematical problems in this project.

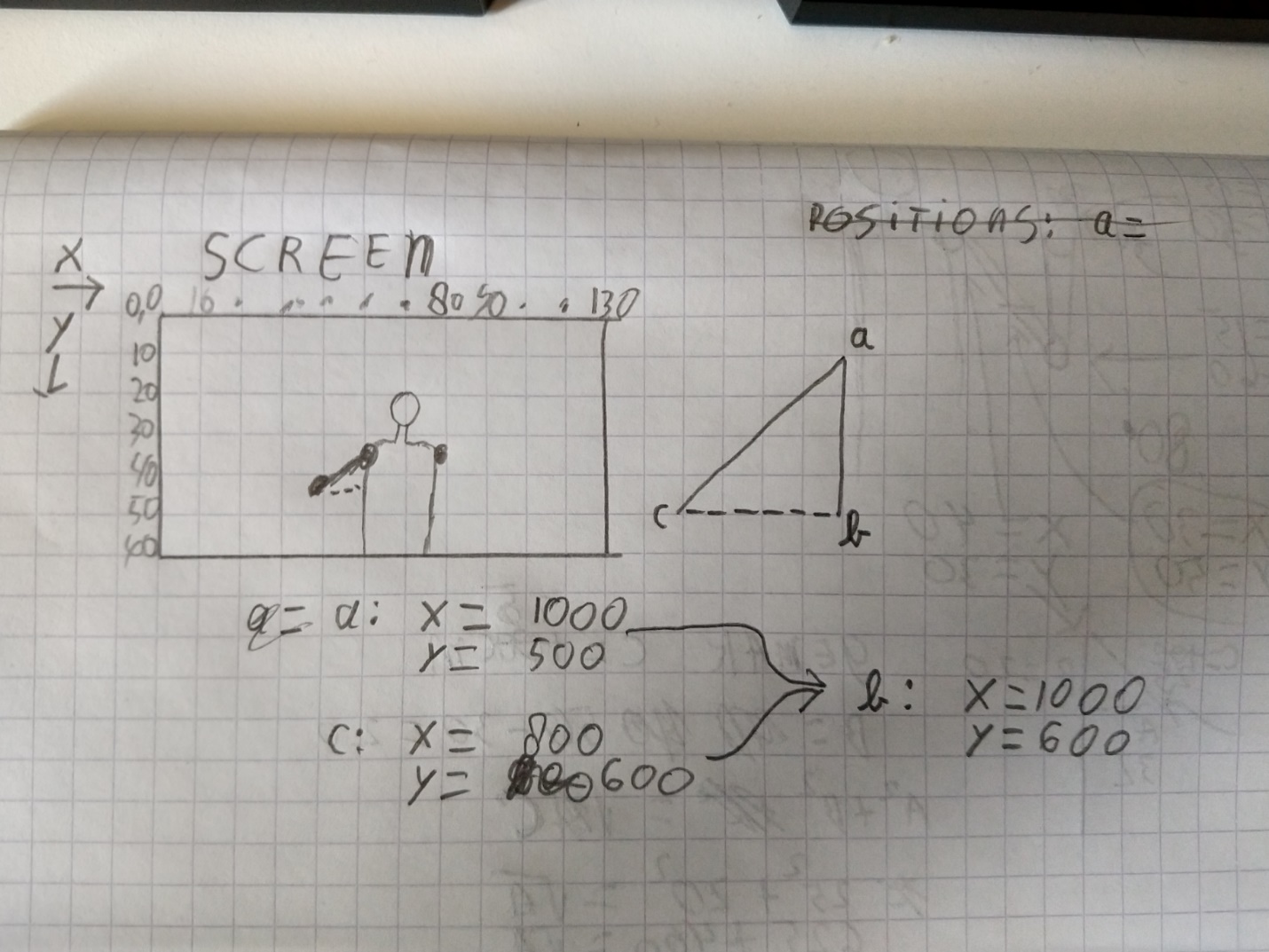
# Calculating the degrees of the servos relative to the user pose

I need to calculate the degrees of the joints for my servo’s.

This image displays my initial thoughts about solving the problem.



Basically I use the coordinates given by the program. Using these coordinates I can create an triangle. But there is a problem. I only get the coordinates of my shoulder and elbow(for the first calculation anyway). I first need to calculate the position for the conversion point. The next drawing should show what I’m trying to say.



The positions of a(shoulder) and c(elbow) are given by the program. With this data b can be calculated.