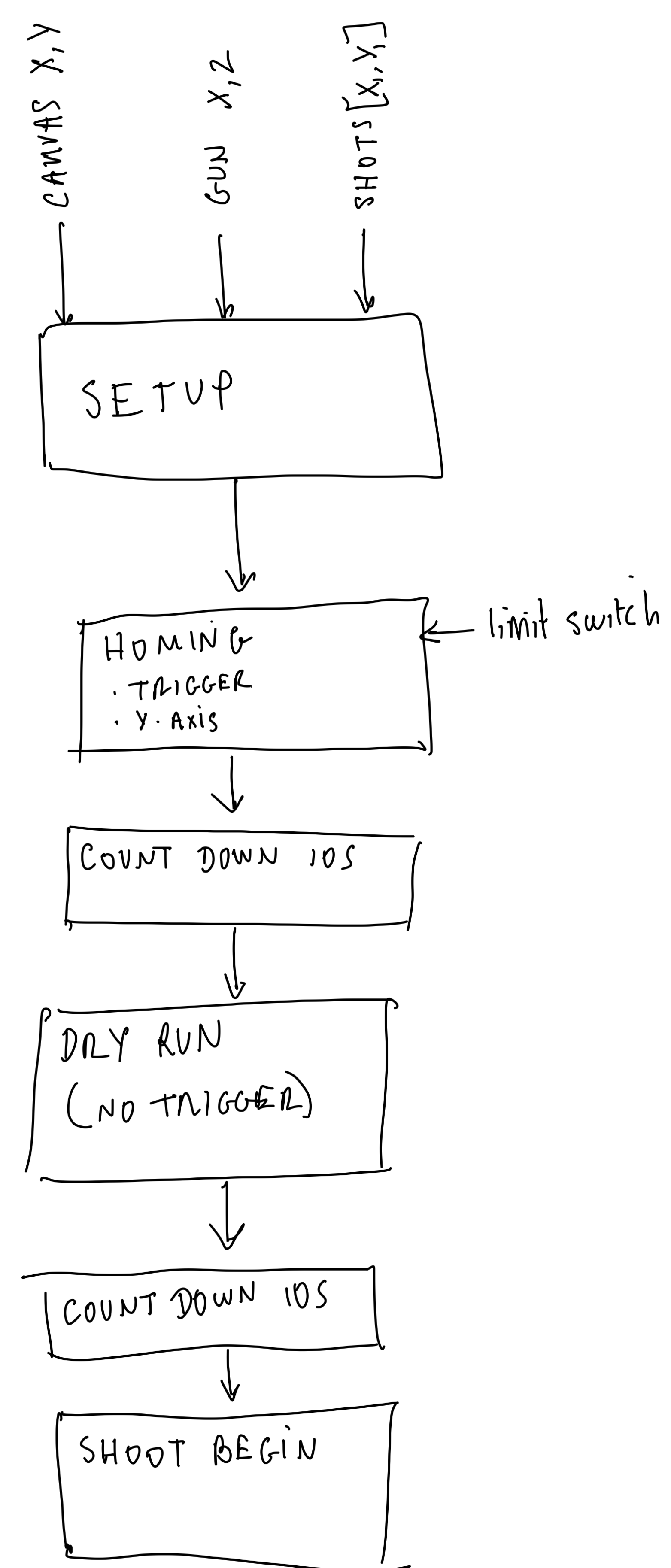
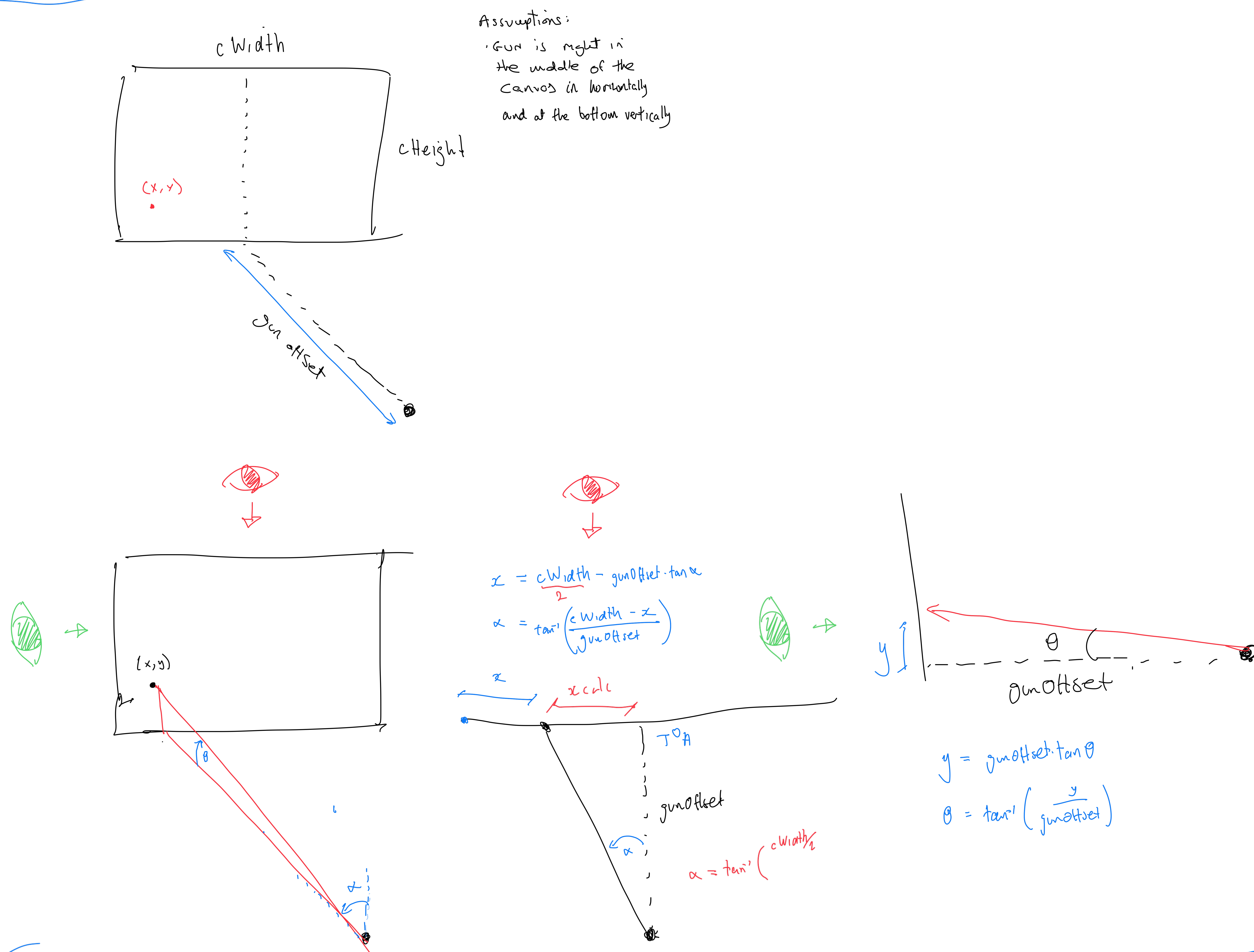


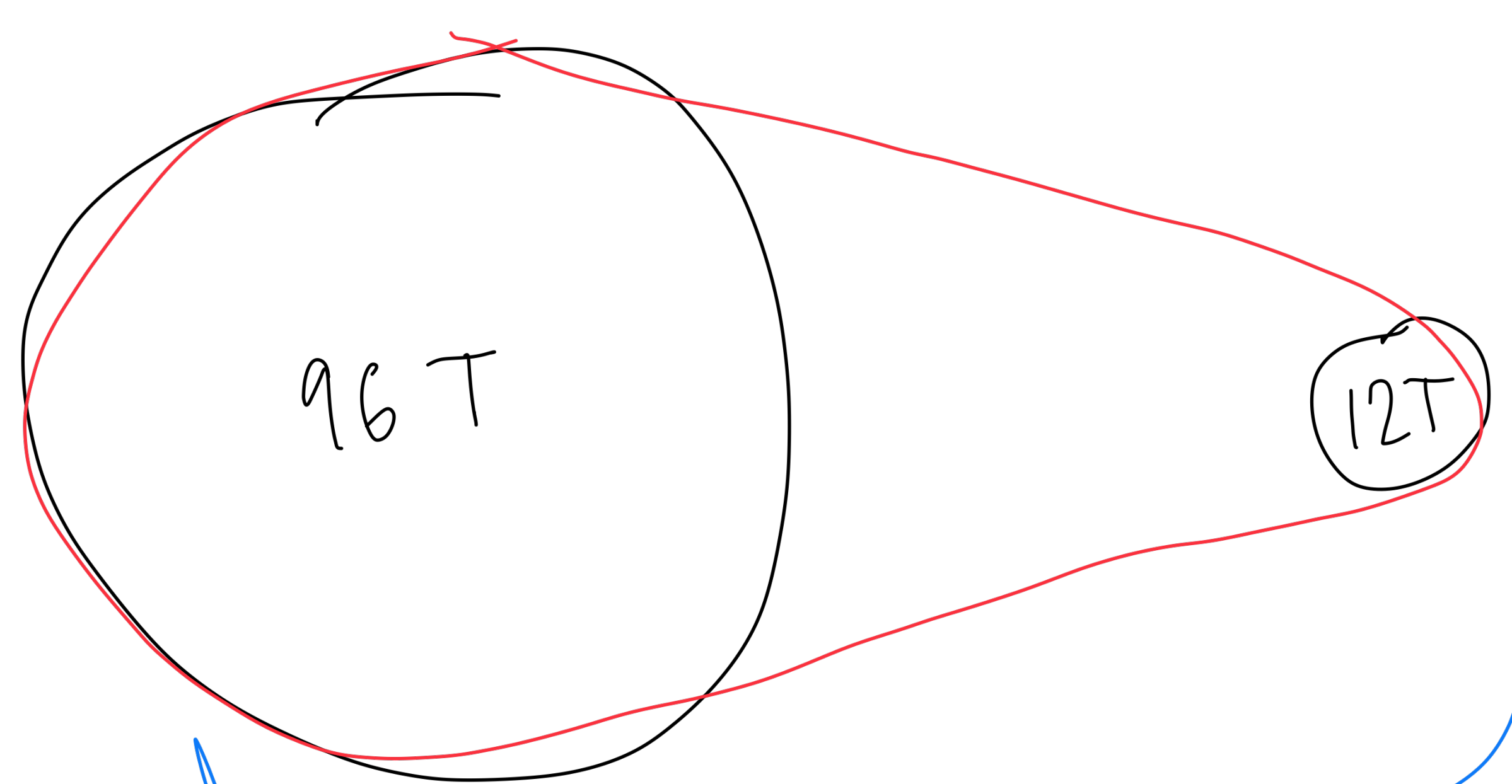
GENERAL LOGIC



FINDING ANGLES FOR A (X,Y) COORDINATE

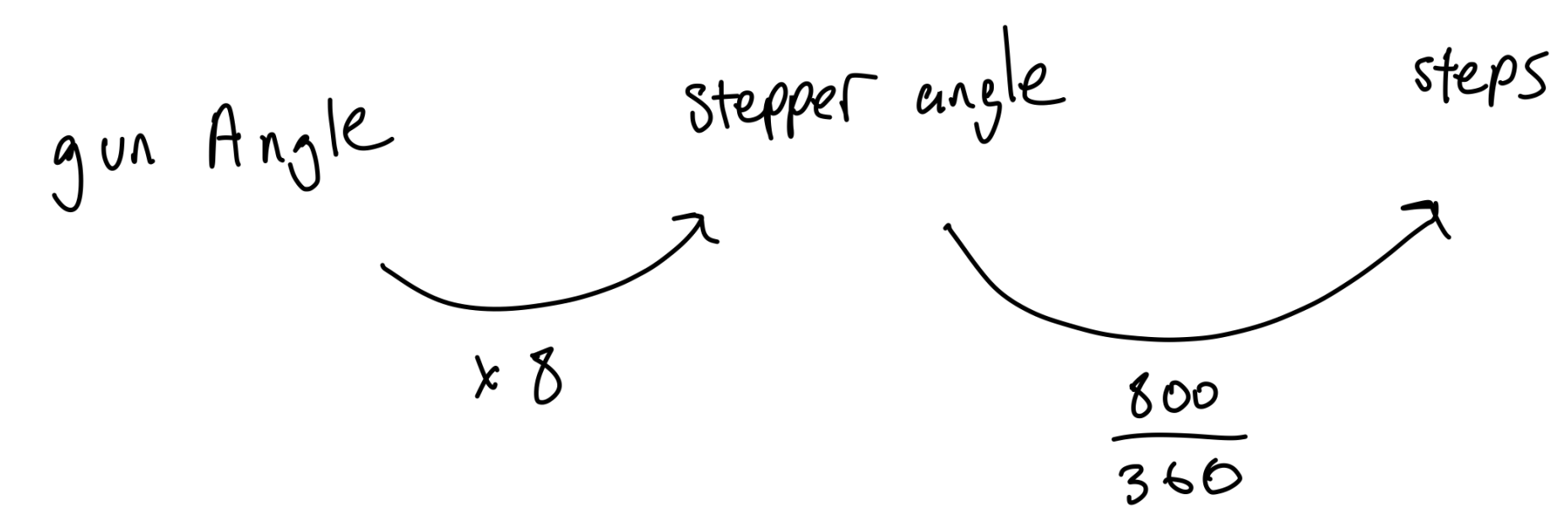


Calculating steps per angle



$$gearRatio = 8$$

$$steps/rev = 800 \quad (\text{stepper control settings})$$



$$K = 8 \times \frac{800}{360} = 17.7778$$

$$\therefore steps = gunAngle \times K$$

simple shoot function

SETUP TARGET PULL TRIGGER
 func (canvas, gun, x, y, TRUE)

calculate θ
 calculate α
 convert θ to steps
 convert α to steps
 move Y
 move X
 activate trigger