bullseye physics

Find xVector, yVector speeds by calculating $sin(V_{initial}), cos(V_{initial})$
$v_x = cos(V_{angle}) * V_{magnitude}$
$pos_x = v_x * dT$
$dT = \sqrt{2V_y/g}$
$dX = V_i/g * sin(2V_{angle})$
Launcher 6
Height 40.5 cm
Shot range @ Stage 1 = 87.5 cm
$40.5cm = 1/2g * t^2$
$40.5cm = 1/2(980cm/s) * t^2$
$(40.5cm * 2)/980cm/s = t^2$
$81/980cm/s = t^2 = 91/980s$
$\sqrt{81/980} = t$
$V_x = 87.5/t$
$V_x = 87.5/0.28$
$312cm/s$
$x = (-b + -\sqrt{b^2 - 4ac})/2a$
check units