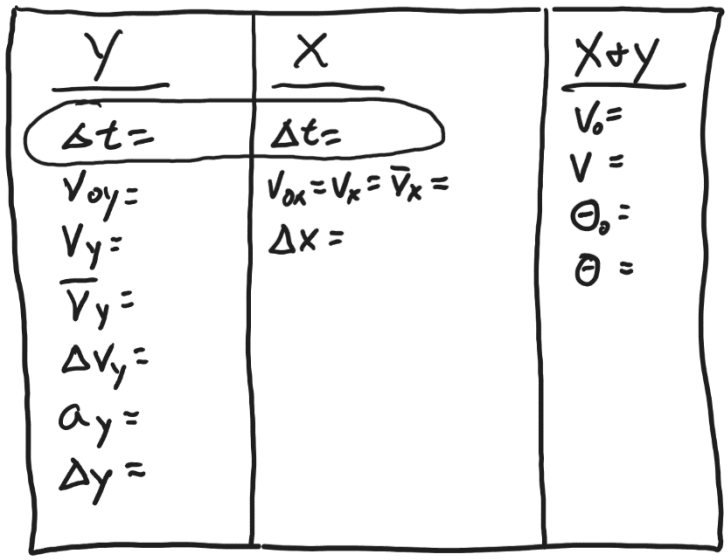
Physics 200
First Projectile Practice Problem – symmetric flight

[This is a similar situation to #2 on p. 9 of the 24-25 handout.]

The Problem: You throw a ball that travels a horizontal distance of 80m, and it stays in the air for 4 seconds. Assuming that the ball lands at the same height at which you released it, and assuming that the ball is in free-fall as it flies…



a. With what speed (in mph) did you throw the ball?

b. At what angle did you throw it?

c. How high did it go?

y	x	x & y
$\Delta t =$	$\Delta t =$	$V_o =$
$V_{oy} =$	$V_{ox} = V_x = \bar{V}_x =$	$V =$
$V_y =$	$\Delta x =$	$\theta_o =$
$\bar{V}_y =$		$\theta =$
$\Delta V_y =$		
$a_y =$		
$\Delta y =$		