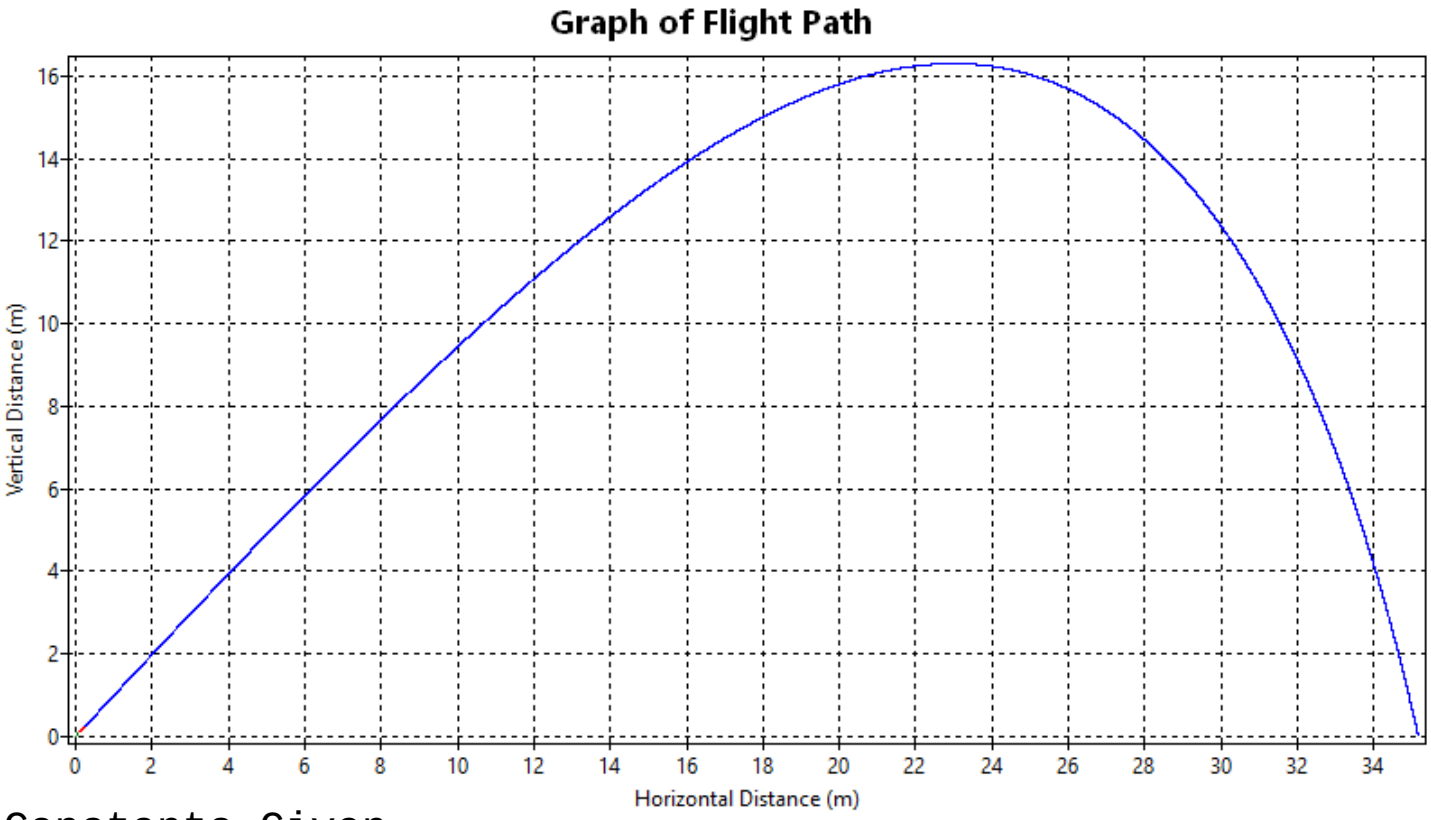

Constants Given

Initial Volume of Water (mÂ³)	0.00005
Atmospheric Pressure (Pa)	101300
Water Density (Kg/mÂ³)	998
Adiabatic Index	1.4
Nozzle Radius (m)	0.011
Air Density (Kg/mÂ³)	1.19

Initial Conditions

Rocket Diameter (m)	0.070
Rocket Length (m)	0.260
Length of Tube (m)	0.165
Gauge Pressure (Psi)	60
Bottle Capacity (mL)	630
Launch Angle (Â°)	45
Mass of Empty Rocket (Kg)	0.03

Measured Constants

Time Step (s)	0.0001
Local Gravity (m/sÂ²)	9.70
Drag Coefficient []	0.66

Resuts

Velocity After Phase 1	25.4453816763162
Displacement After Phase 1	0.165
Velocity After Phase 2	52.5389584889201
Displacement After Phase 2	0.343303512902849
Total Distance	35.165574339975
Max Height	16.3053017053427
Correction Factor	1
Flight Time	3.59120000000315