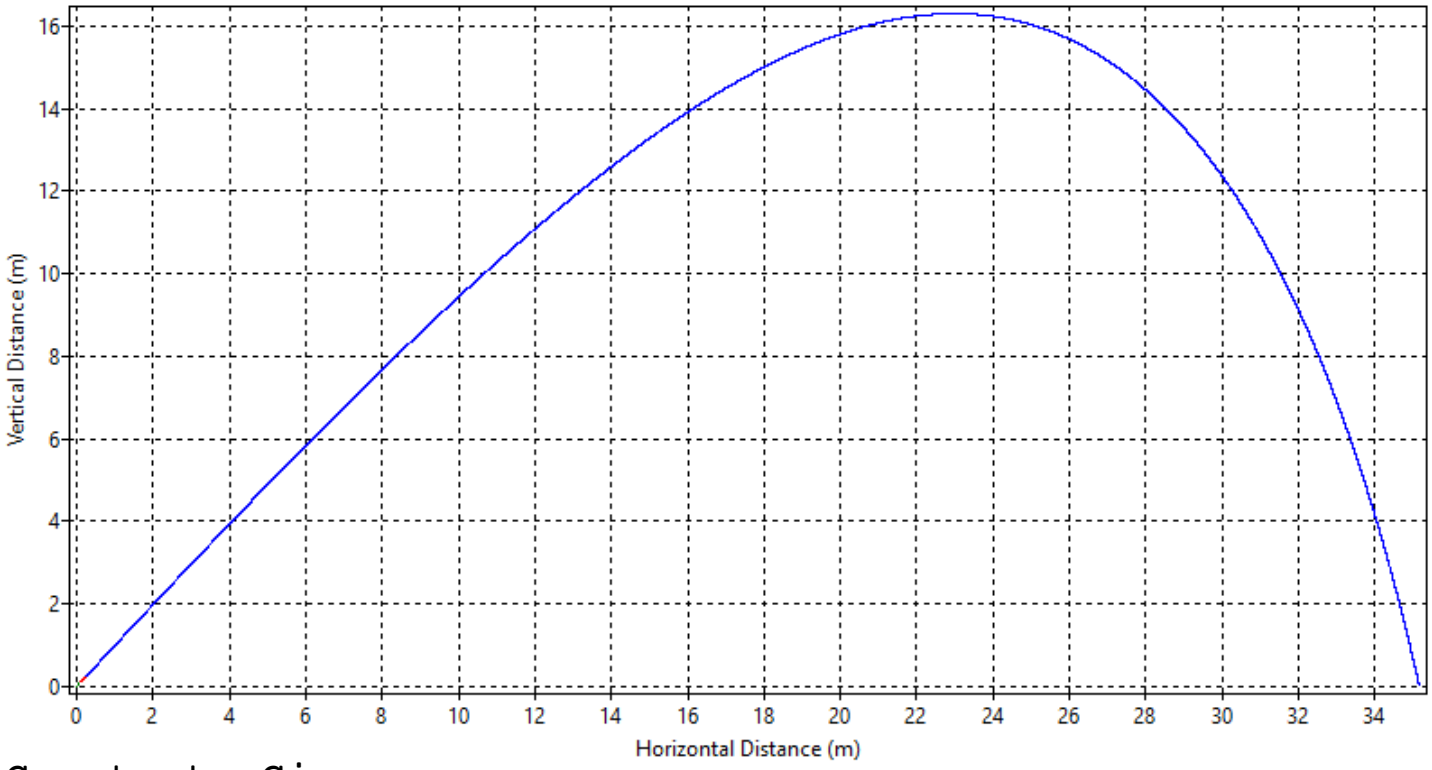
## Graph of Flight Path




## Constants Given

| | |
|---|---|
| Initial Volume of Water (m³) | 0.00005 |
| Atmospheric Pressure (Pa) | 101300 |
| Water Density (Kg/m³) | 998 |
| Adiabatic Index | 1.4 |
| Nozzle Radius (m) | 0.011 |
| Air Density (Kg/m³) | 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 (°) | 45 |
| Mass of Empty Rocket (Kg) | 0.03 |

## Measured Constants

| | |
|---|---|
| Time Step (s) | 0.0001 |
| Local Gravity (m/s²) | 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 |