

Flinn Forensic Files — Ballistics Worksheet

Data Table and Observations

	Bullet Height (in inches)	Footprint Distance (in inches)	Minor Axis (mm)	Major Axis (mm)	Impact Angle	Angle of Elevation/Depression	Height of Shooter (ft and inches)
Bullet #1							
Bullet #2							
Bullet #3							

Bullet Hole #1 Sketch	Bullet Hole #2 Sketch	Bullet Hole #3 Sketch

Post-Lab Questions and Calculations (Answer on a separate sheet of paper).

- Based on the measurements obtained in the above table, calculate the impact angle (to the nearest degree) for each bullet. Show work below and record final value in the table.
- Calculate the angle of elevation/depression for each bullet hole (to the nearest degree). Based on tests with dowel rods and lasers done by the investigator's bullets #1 and #2 are angles of elevation (above the shooter's shoulders) and bullet #3 is an angle of depression. Show work and record final value in the table.
- Calculate the height of each of the three shooters. Assume the height from the shoulder to the top of the head is 8".
- The bullet hole found in Marty Higgins' bedroom wall was 45" from the ground. Based on the dowel rod tests it is an angle of depression. The shooter was estimated to have been 130" away from the wall. The impact angle was measured and found to be 84°. Determine which of the three suspects could have possibly been the shooter.
- Explain other variables that could alter the accuracy of results.