Bernoulli's Lab Challenge

Challenge: A coke bottle is placed on the lab table and filled to a given height h with water (density = 1000 kg/m^3). A hole is punched in the side of the bottle near the bottom and the water is allowed to flow out of the hole. It is your job to place a cup where you think the water will land, if it is allowed to spray over the edge of the table.

1. Develop a detailed procedure indicating what measurements you will take and how you will determine where the water will land. Be sure to indicate what equations you will use and how you will determine each variable.

2. Collect all equipment you will need, and run the lab according to your procedure developed in part 1. You must show ALL work to receive full credit. Indicate clearly the distance D that you calculated.