Math 113: Classroom Activity 2 10 pts			Name :						
Materials Needed: Paper, washers, colored markers, ruler									
Instructions: Divide into pairs. Place the sheet of paper on the desk and tape it down on the edge closest to you. Place a washer behind the line and flick the washer with your finger, trying to get it as close to center of the target as possible. Mark the center of the washer with a dot and then repeat until there are at least five marks on the paper.									
	Now, let the other partner flick the washer. Mark the centers with a different color (or perhaps an x instead of a dot).								
	1. Record the location of each mark using an x-y coordinate system. Give all values with one decimal place (to the nearest mm).								
a.	a. First person's name:								
X									
У									
b. Second person's name:									
X									
у									
2. Complete the following tables for <u>your</u> points. Your partner will use his/her points. total									
X									
$x-\overline{x}$									
$(x-\overline{x})^2$									

у				
$y-\overline{y}$				
$(y-\overline{y})^2$				

- 3. Enter your x and y values into Minitab and use Calc / Calculator to find two new variables. $d_1 = \sqrt{x^2 + y^2}$ is the distance each point is from the center of the target and $d_2 = \sqrt{\left(x \overline{x}\right)^2 + \left(y \overline{y}\right)^2}$ is the distance each point is from the centroid (center of the shots). The Minitab function for square root is SQRT() and the exponential function is **. For the first formula, you would store the results in d1 and the expression would be SQRT(x**2+y**2). If $\overline{x}=2.5$ and $\overline{y}=3.7$, then for the second formula, you would store the results in d2 and the expression would be SQRT((x-2.5)**2+(y-3.7)**2). You will need to use your numbers for the second formula instead of 2.5 and 3.7.
- 4. Summarize the data for each person.

Name								
Variable	х	У	d_1	d_2	х	У	d_1	d_2
n								
Mean								
Median								
Variation								
Variance								
St Dev								

