Student's Name: Student's Name:

_____   _____

Lab day & time: _____   Date: _____

Measurements and Experimental Errors (M1) - Data Sheets

Activity 3: Average Value and Standard Deviation   *(3.5 p.)*

Be sure to fill-in the correct units in the space provided: (   )

Number of data points N = 600

Average distance to the motion sensor $x_{average}$ = _____ (   )

Standard deviation s_x = _____ (   )

It is customary to write our result as:

$$x = x_{average} \pm s_x \text{ (units)}$$

Calculate the average distance $x_{average}$ and the standard deviation s_x of the distance measurements. Make sure to use "STDEV" Excel function - standard deviation based on a sample.

$$x = x_{average} \pm s_x = \text{_____} (   )$$

Students are expected to **complete the lab report and return it to the lab TA** before the end of the scheduled lab time.