

Laser Pointer Project

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May 10, 2017

In this project participants point a laser at a point and a device records when and how far they go from the point. The data was recorded and we wrote scripts to find average and standard deviation of the x and y. Then a total was found for standard deviation. The data below are the results of the project.

Data	x avg	x std	y avg	y std	total std
../data-201745135431.txt	499.927631579	6.92372922028	572.401315789	12.6198308855	14.39437938552
../data-201745135111.txt	493.39375	8.66890768454	576.40625	15.7136346805	17.94626076137
../data-20174513521.txt	492.327160494	8.09481334475	577.561728395	18.5242042198	20.21564109948
../data-201745135944.txt	502.820512821	9.98179328258	541.25	22.1089025379	24.25777748612
../data-201745135246.txt	485.550632911	14.9941430738	574.772151899	23.5635797676	27.9296727152
../data-201745135851.txt	494.953947368	20.7981053034	586.526315789	28.0834345878	34.9462513362
../data-20174513577.txt	489.301282051	17.3981898864	586.121794872	28.1099633279	33.0585397381
../data-201745135328.txt	479.344155844	25.7276039217	580.733766234	33.0980982535	41.9212799369
../data-201745135616.txt	487.681818182	19.1543091707	590.5	34.9811039217	39.8818905192
../data-20174513581.txt	475.126582278	41.8862522849	593.981012658	55.4329950711	69.4785943512

Table 1: table 1: 1 second data

Data	x avg	x std	y avg	y std	total std
../data-20174513521.txt	495.666666667	8.41130192063	587.333333333	11.0707949127	13.90368656144
../data-201745135431.txt	497.375	3.52288437019	577.75	12.9117886334	13.38375881429
../data-201745135328.txt	491.375	4.69612302102	572.4375	13.2326368714	14.04123392009
../data-201745135944.txt	506.125	5.53398590529	574.1875	13.6144290579	14.69617904669
../data-201745135111.txt	498.1875	10.7833784131	589.8125	13.9333554055	17.6187298877
../data-20174513577.txt	472.666666667	16.2480768093	579.5	27.3450178278	31.8080178571
../data-201745135246.txt	492.25	15.0665191733	563.0	29.8005273204	33.3926852555
../data-201745135616.txt	474.8125	13.1799021783	589.375	30.6416499929	33.3559670181
../data-201745135851.txt	491.625	24.9596102305	596.9375	32.24619302	40.7774337978
../data-20174513581.txt	524.9375	23.0688991316	598.5625	34.5950424813	41.5811384094

Table 2: Table 2: 10 second data



