Lab - Motion of Trucks

Table 1 - Calibration of Timer

	time	# dots	dots/s
Trial 1	2.83	174	61.48

Actual Time Per Dot (s): | 0.0167 |

Table 2 - Speed of Truck

time	y	Δy	v	Δv	a
(s)	(cm)	(cm)	(cm/s)	(cm/s)	(cm/s/s)
0.000	0.00				
0.017	0.03	0.03	1.80		
0.033	0.06				
0.050	0.10	0.04	2.40	0.60	18.00
0.067	0.20				
0.083	0.30	0.10	6.00	3.60	108.00
0.100	0.40				
0.117	0.50	0.10	6.00	0.00	0.00
0.133	0.65				
0.150	0.78	0.13	7.80	1.80	54.00
0.167	1.20				
0.183	1.35	0.15	9.00	1.20	36.00
0.200	1.50				
0.217	1.80	0.30	18.00	9.00	270.00
0.233	2.18				
0.250	2.40	0.23	13.50	-4.50	-135.00
0.267	2.70				
0.283	3.00	0.30	18.00	4.50	135.00
0.300	3.30				
0.317	3.60	0.30	18.00	0.00	0.00
0.333	3.90				
0.350	4.20	0.30	18.00	0.00	0.00
0.367	4.50				
0.383	4.90	0.40	24.00	6.00	180.00
Averages			**11.88**		**60.55**