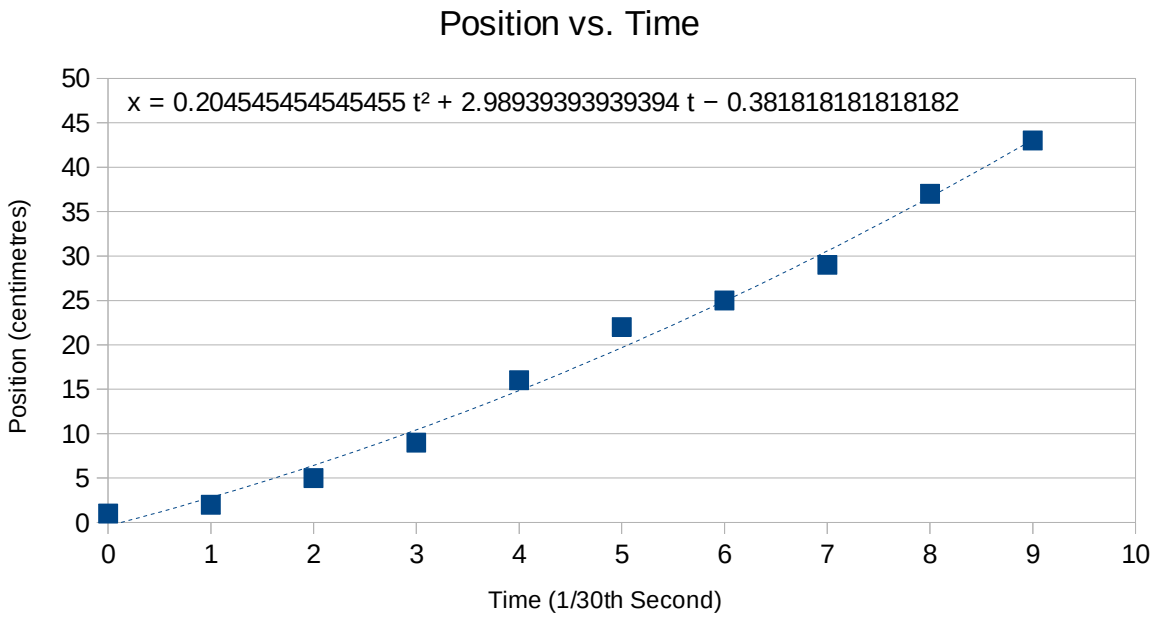
Take 2

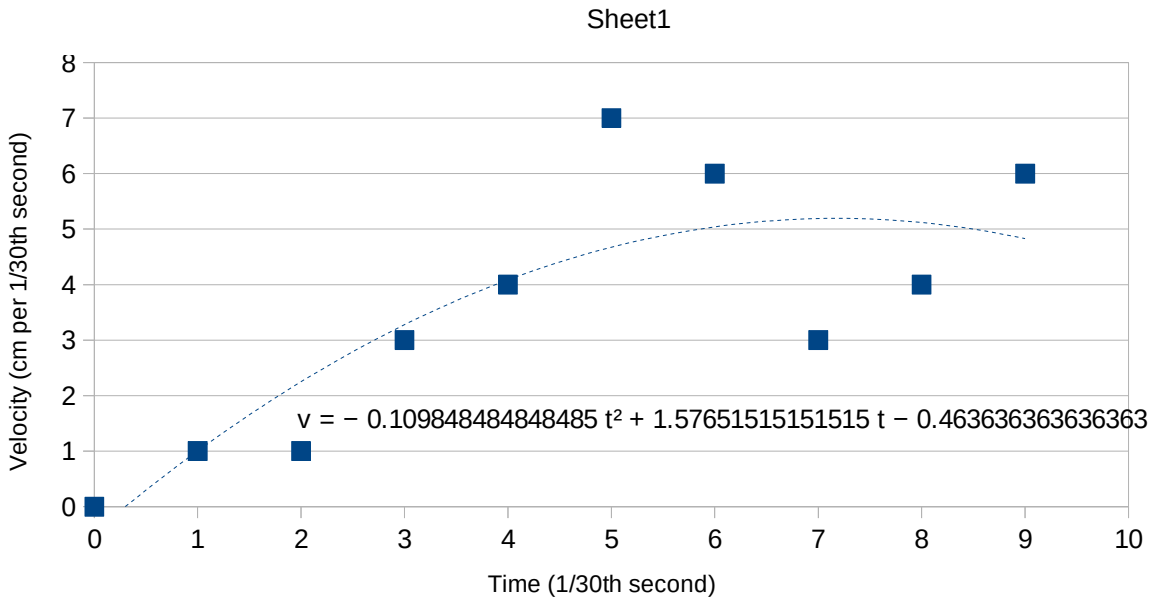
t (1/30th s)	x
0	1
1	2
2	5
3	9
4	16
5	22
6	25

t (1/30th s)	dx
0-1	1
1-2	1
2-3	3
3-4	4
4-5	7
5-6	6
6-7	3

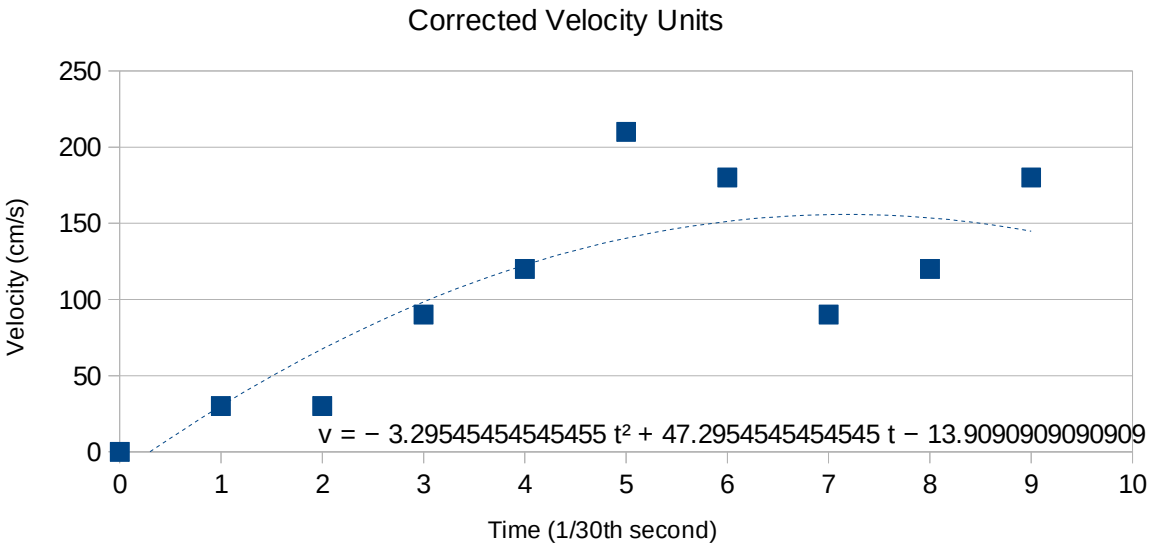


t (1/30th s)	v (cm/1/30th s	v (cm/s)
0	0	0
1	1	30
2	1	30
3	3	90
4	4	120
5	7	210
6	6	180
7	3	90
8	4	120
9	6	180

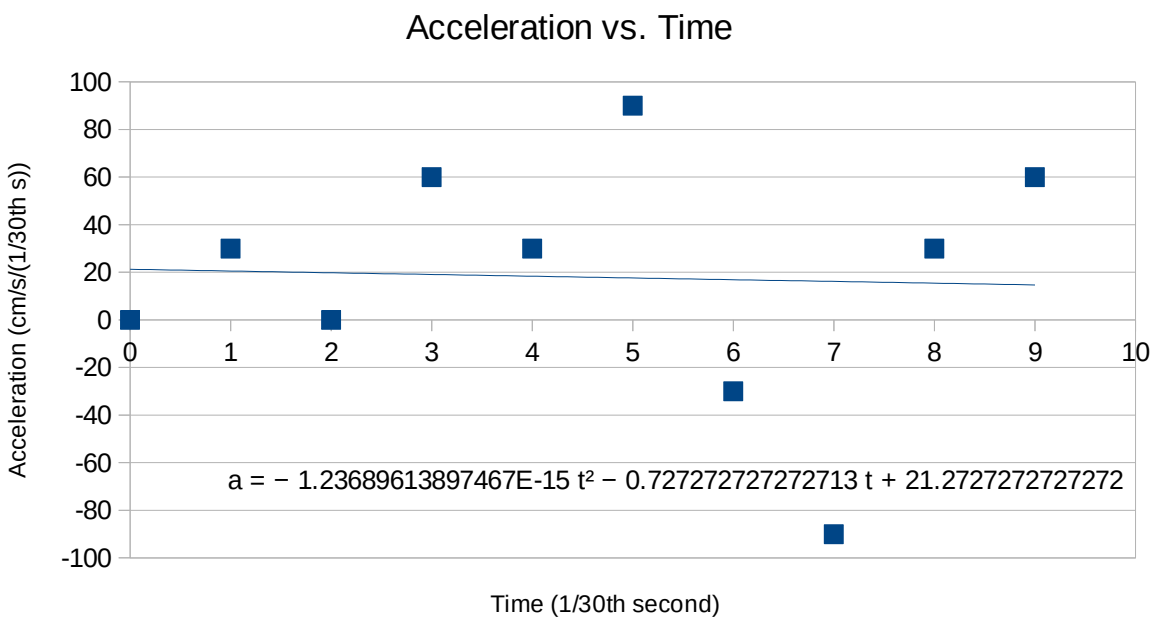
Velocity vs. Time



Velocity vs. Time

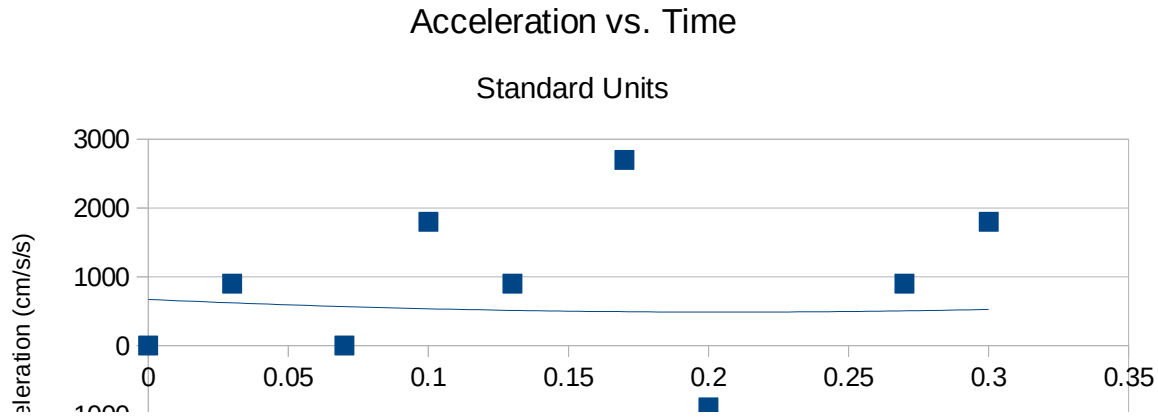


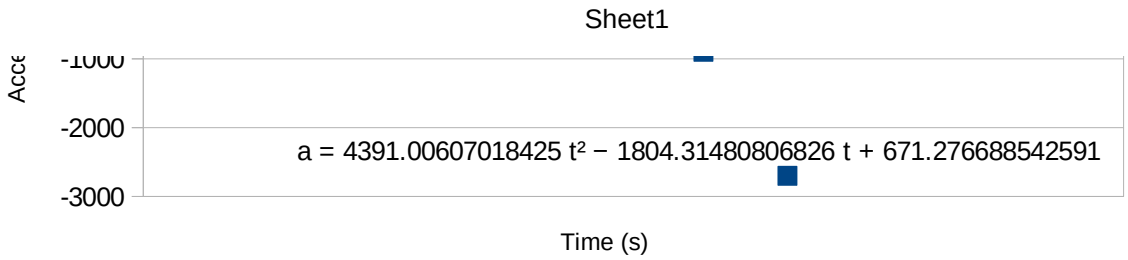
t (1/30th s)	a (cm/s/(1/30th s))
0	0
1	30
2	0
3	60
4	30
5	90
6	-30
7	-90
8	30
9	60

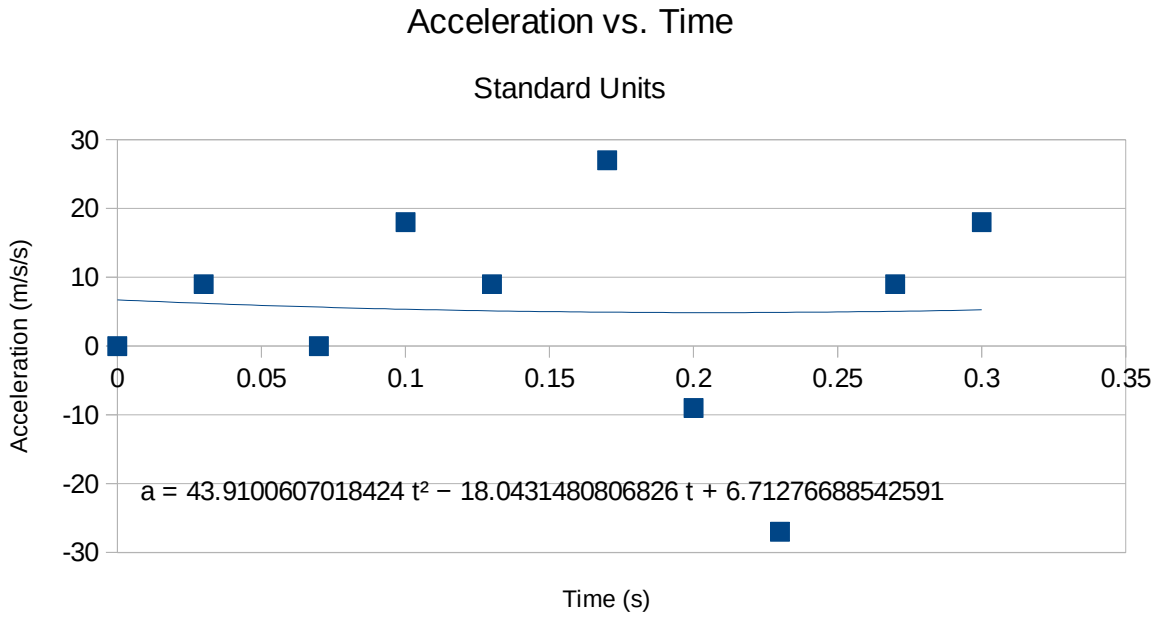


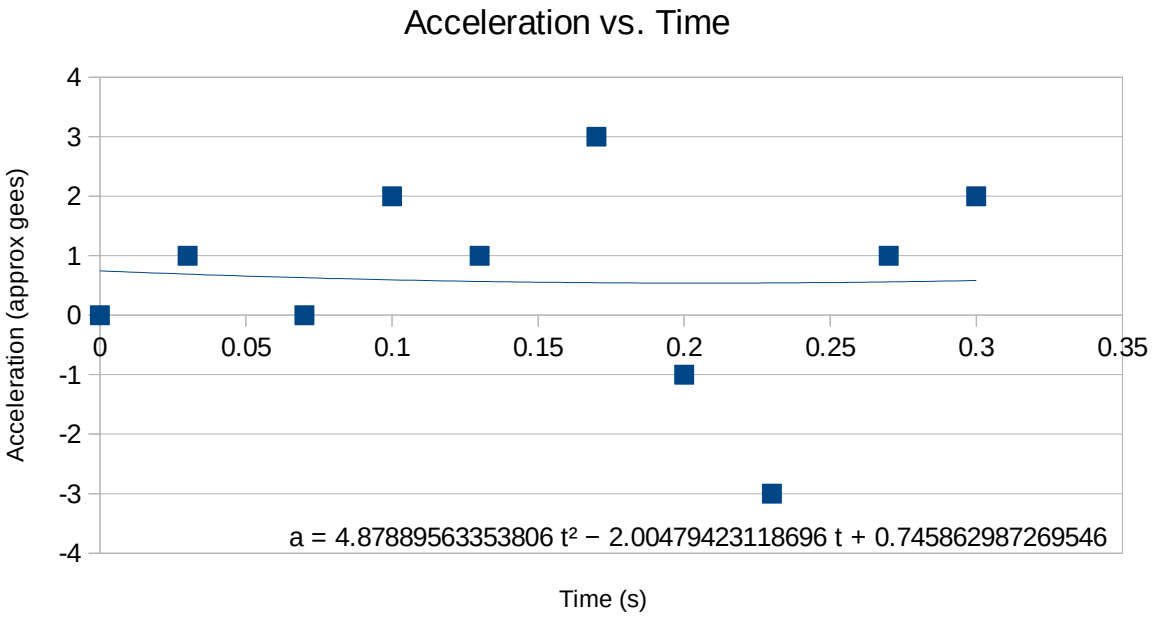
I don't think that's supposed to happen, let's correct the units.

t (s)	a (cm/s/s)	a (m/s/s)	a (approx gees)
0	0	0	0
0.03	900	9	1
0.07	0	0	0
0.1	1800	18	2
0.13	900	9	1
0.17	2700	27	3
0.2	-900	-9	-1
0.23	-2700	-27	-3
0.27	900	9	1
0.3	1800	18	2
lerations:	540 cm/s/s	5.4 m/s/s	




Sheet1
-1000
-2000
-3000
a = 4391.00607018425 t² − 1804.31480806826 t + 671.276688542591
Time (s)


Acceleration vs. Time
Standard Units
Acceleration (m/s/s)
30
20
10
0
-10
-20
-30
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
a = 43.9100607018424 t² − 18.0431480806826 t + 6.71276688542591
Time (s)


Acceleration vs. Time
Acceleration (approx gees)
4
3
2
1
0
-1
-2
-3
-4
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
a = 4.87889563353806 t² − 2.00479423118696 t + 0.745862987269546
Time (s)