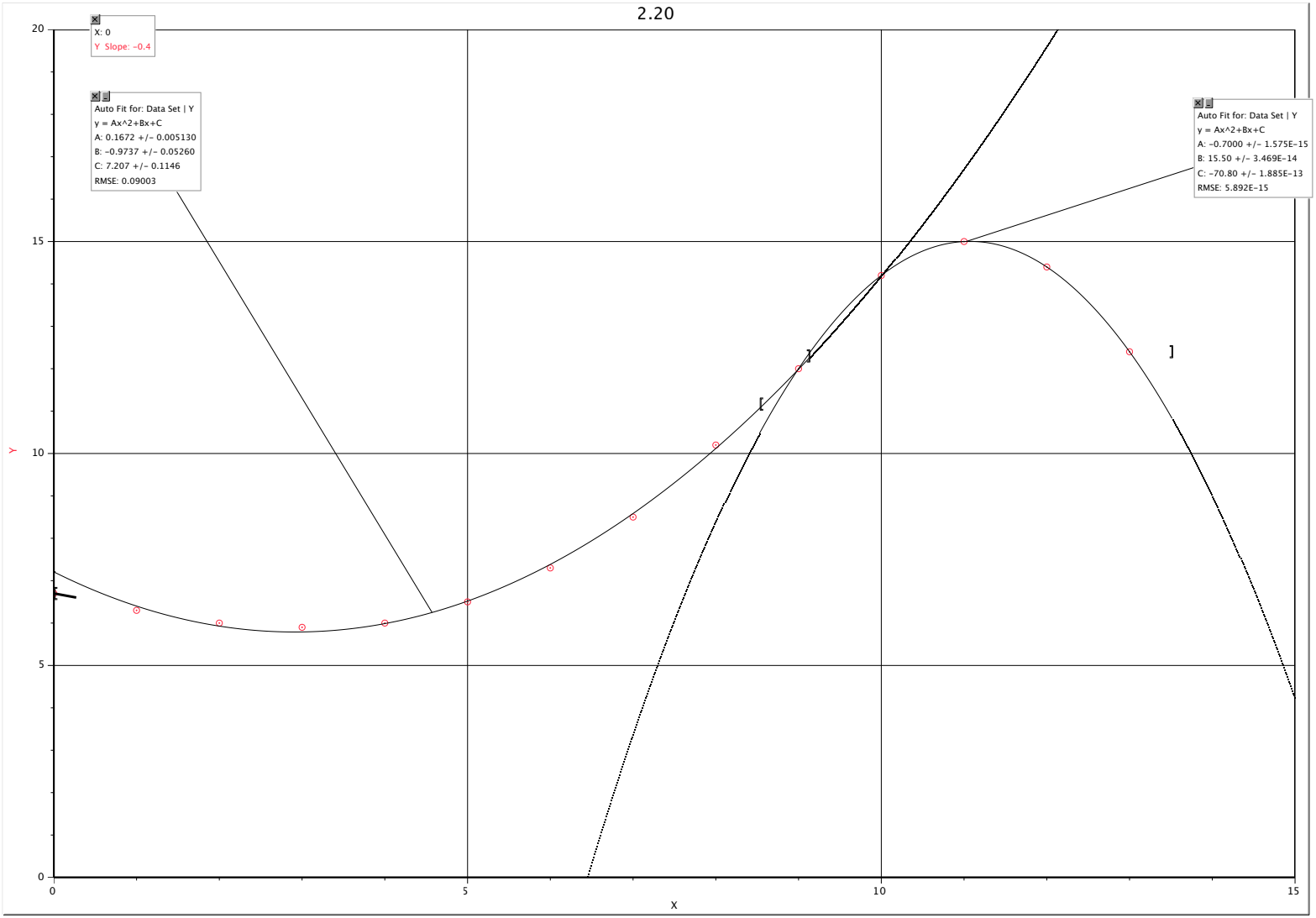
	Data Set	
	X	Y
1	0	6.7
2	1	6.3
3	2	6.0
4	3	5.9
5	4	6.0
6	5	6.5
7	6	7.3
8	7	8.5
9	8	10.2
10	9	12.0
11	10	14.2
12	11	15.0
13	12	14.4
14	13	12.4

2.20

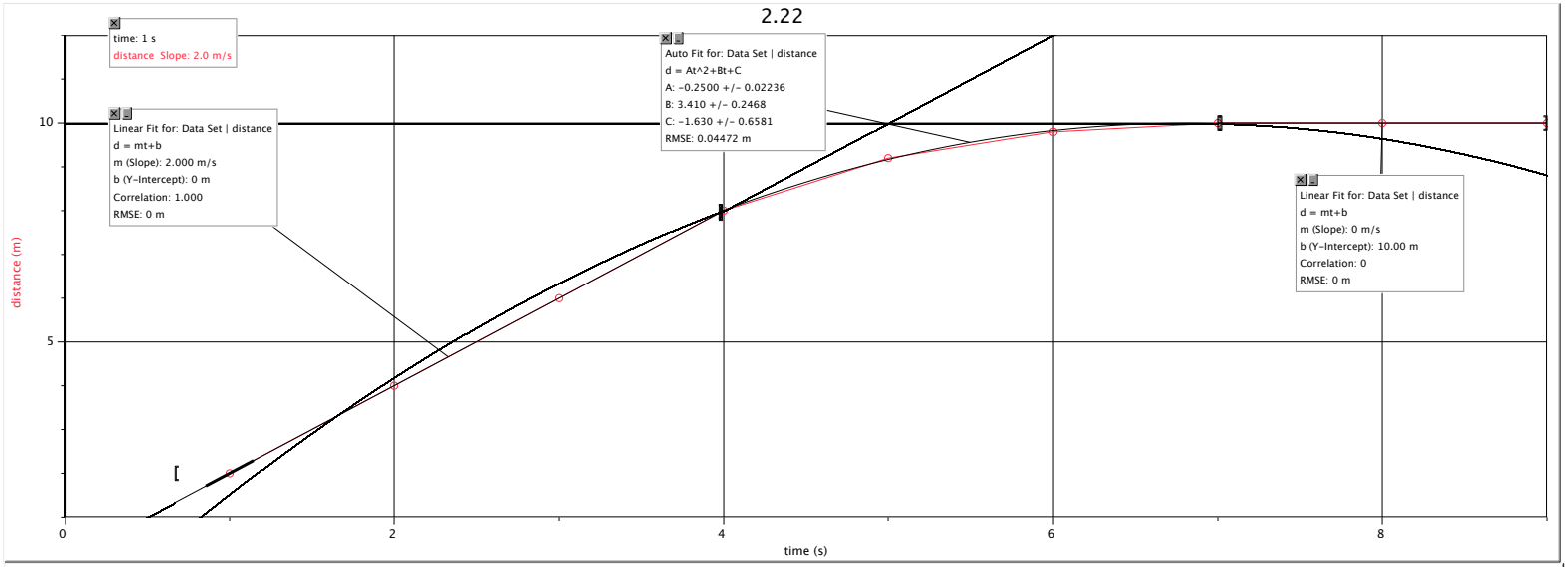
Quadratics were fit through points, slopes of tangents found using tangent function.

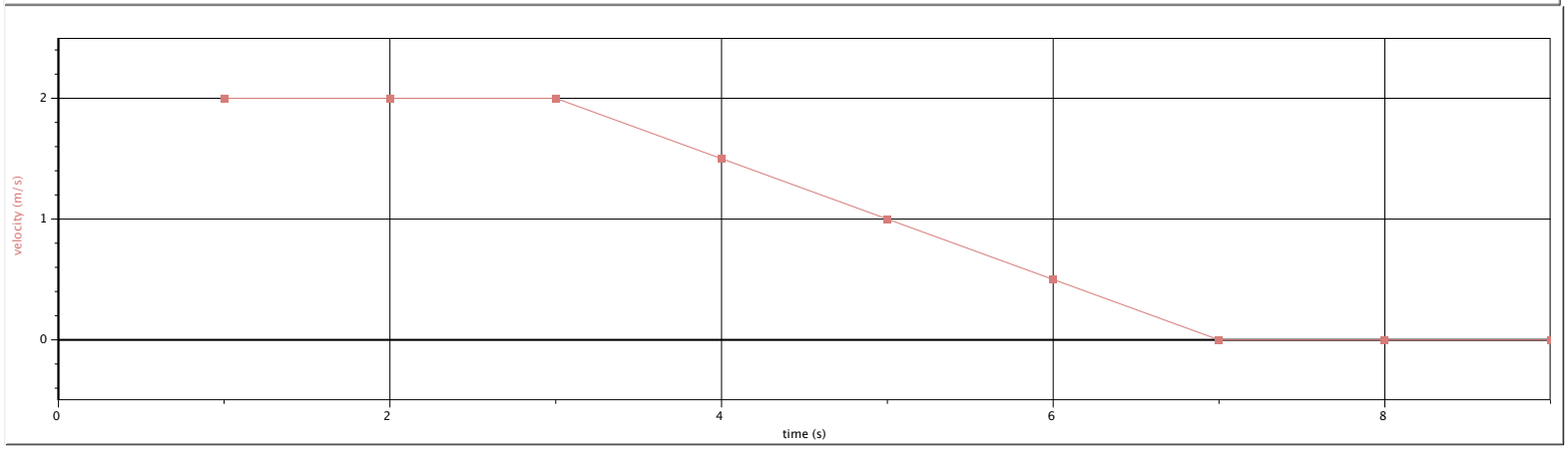
at x=5, slope = 0.7

at x=10, slope = 1.2



	Data Set		Data Set 2	
	time (s)	d (m)	time (s)	v (m/s)
1	1	2.0	1	2.0
2	2	4.0	2	2.0
3	3	6.0	3	2.0
4	4	8.0	4	1.5
5	5	9.2	5	1.0
6	6	9.8	6	0.5
7	7	10.0	7	0.0
8	8	10.0	8	0.0
9	9	10.0	9	0.0

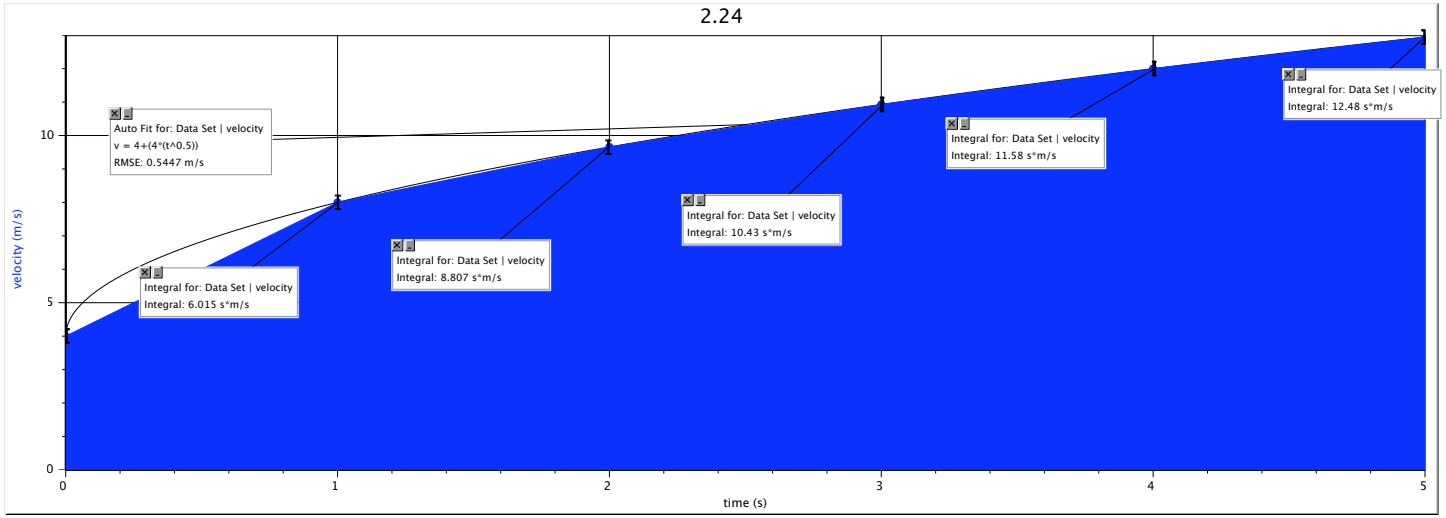




2.22

from 4s to 6s, a quadratic curve was fit to the data. The velocity was estimated using the tangent function (instantaneous velocity = slope of tangent).

	Data Set		
	time (s)	Δx (m)	v (m/s)
1	0	0.0	4.000
2	1	6.0	8.000
3	2	14.8	9.657
4	3	25.2	10.92
5	4	36.8	12.00
6	5	49.3	12.94
7			



2.24

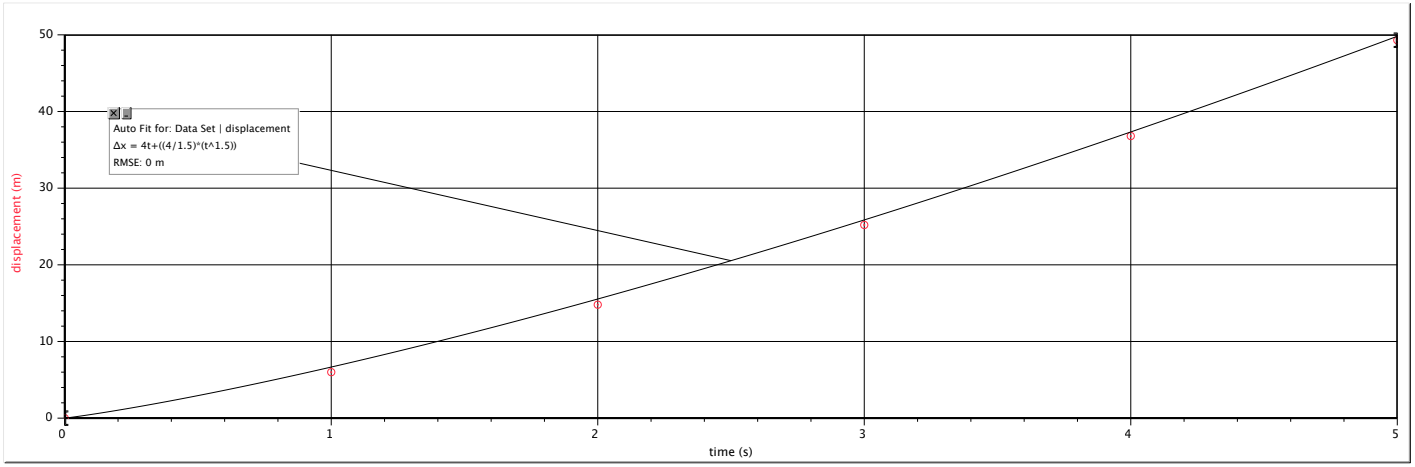
Note that value for area under curve from 0s-1s is low.

6.015m + 8.807m = 14.822m

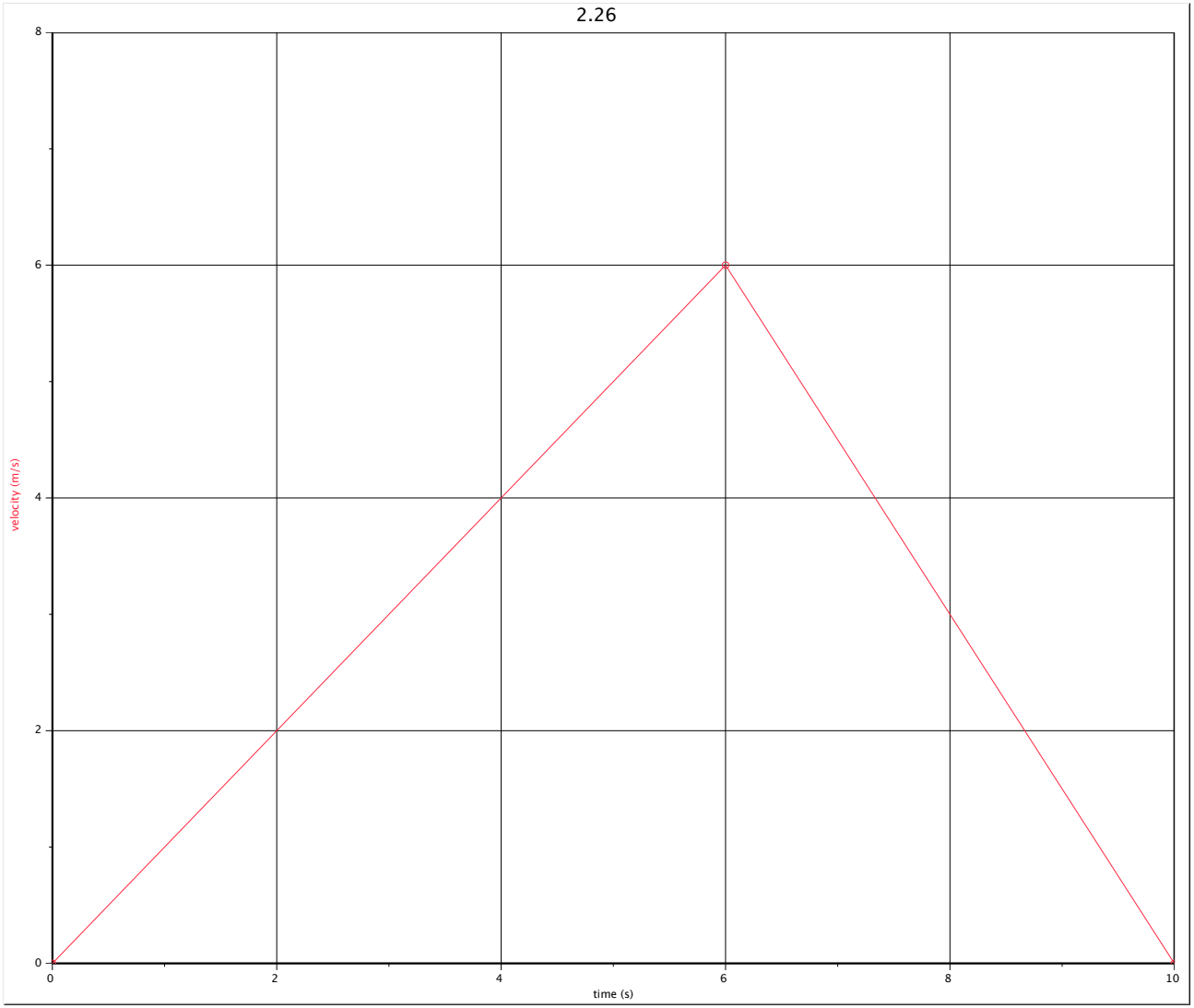
14.822m + 10.43m = 25.252m

25.252m + 11.58m = 36.832m

36.832m + 12.48m = 49.312m



	Data Set	
	time (s)	v (m/s)
1	0	0
2	6	6
3	10	0



2.26

area of triangle from 0s-6s:

elapsed time = 6s - 0s = 6s

area = 1/2 b h = 1/2 (6s)(6m/s) = 18m

area of triangle from 6s-10s:

elapsed time = 10s - 6s = 4s

area = 1/2 (4s)(6m/s) = 12m

18m + 12m = 30m