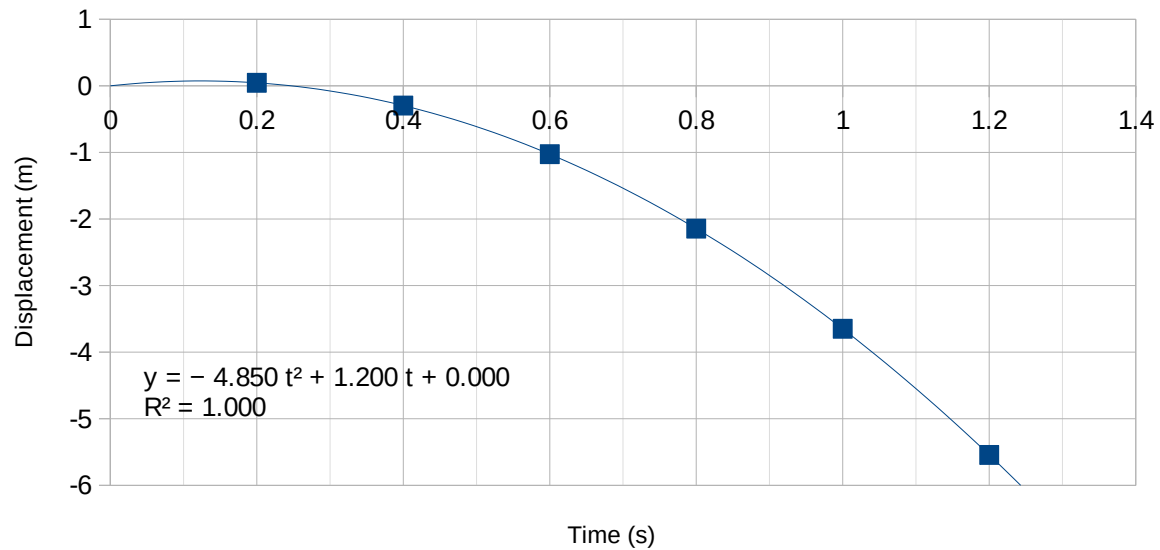


Data Set 1

Time (s)	Position (m)
0.2	0.046
0.4	-0.296
0.6	-1.026
0.8	-2.144
1	-3.65
1.2	-5.544

Expected $g(m/s^2)$: -9.81
 $\frac{1}{2} * g (m/s^2)$: -4.850
 $g (m/s^2)$: -9.700
% difference : 1.12%
initial velocity (m/s): 1.200
Initial direction Travelling up

Free fall

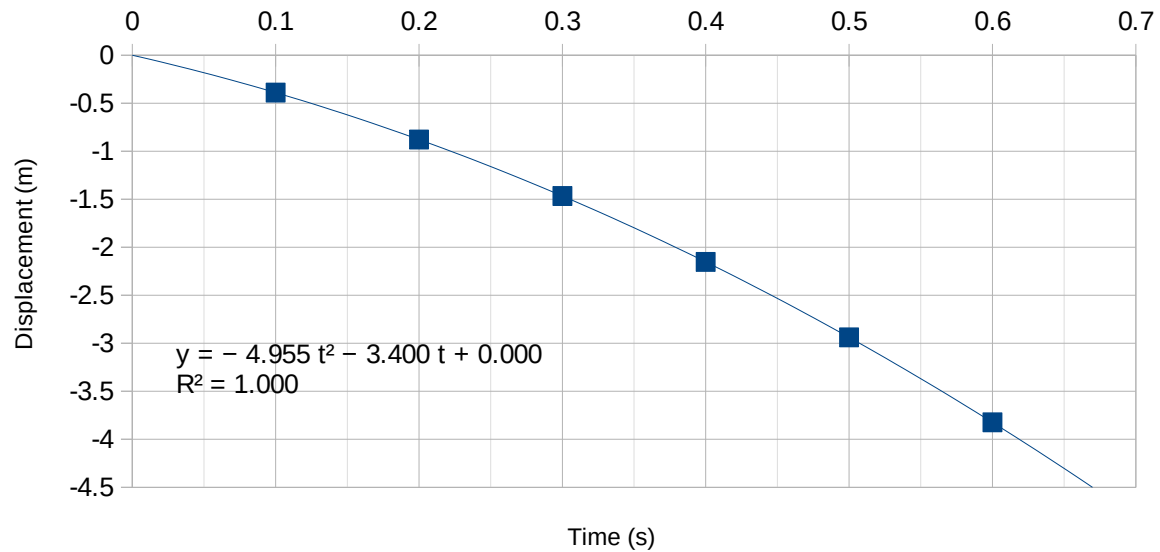


Data Set 2

Time (s)	Position (m)
0.1	-0.38955
0.2	-0.8782
0.3	-1.46595
0.4	-2.1528
0.5	-2.93875
0.6	-3.8238

Expected g (m/s²): -9.81
 $\frac{1}{2} * g$ (m/s²): -4.955
 g (m/s²): -9.910
 % difference : 1.02%
 Initial velocity (m/s): -3.400
 Initial direction Travelling down

Free fall



Data Set 3

Time (s)	Position (m)		
0.5	1.52875	Expected g(m/s^s):	-9.81
1	0.615	$\frac{1}{2} * g \text{ (m/s}^2\text{)}$:	-4.885
1.5	-2.74125	g (m/s^2) :	-9.770
2	-8.54	% difference :	0.41%
2.5	-16.78125	initial velocity (m/s):	5.500
3	-27.465	Initial direction	Travelling up

Free fall

