

Newton's Second Law

Example

Height (m)	0.7											
g (m/s ²)	9.81											
m1 (Kg)	m2 (Kg)	total mass (Kg)	m2/(m2+m1)	t1 (sec)	t2 (sec)	t3 (sec)	t4 (sec)	t5 (sec)	taveg(sec)	aexp (m/sec ²)	atheo (m/sec ²)	Force (N)
0.340	0.010	0.350	0.03	2.27	2.25	2.29	2.28	2.26	2.27	0.27	0.28	0.10
0.335	0.015	0.350	0.04	1.79	1.81	1.80	1.82	1.78	1.80	0.43	0.42	0.15
0.330	0.020	0.350	0.06	1.60	1.58	1.62	1.61	1.59	1.60	0.55	0.56	0.20
0.325	0.025	0.350	0.07	1.47	1.45	1.46	1.48	1.44	1.46	0.66	0.70	0.25
0.320	0.030	0.350	0.09	1.31	1.34	1.29	1.32	1.30	1.31	0.81	0.84	0.29
0.315	0.035	0.350	0.10	1.22	1.24	1.23	1.24	1.25	1.24	0.92	0.98	0.34
0.310	0.040	0.350	0.11	1.10	1.15	1.13	1.12	1.14	1.13	1.10	1.12	0.39
0.305	0.045	0.350	0.13	1.06	1.05	1.04	1.03	1.07	1.05	1.27	1.26	0.44
0.300	0.050	0.350	0.14	0.97	0.96	0.97	0.98	0.96	0.97	1.49	1.40	0.49

Chart 1: Aexp vs Mass Ratio

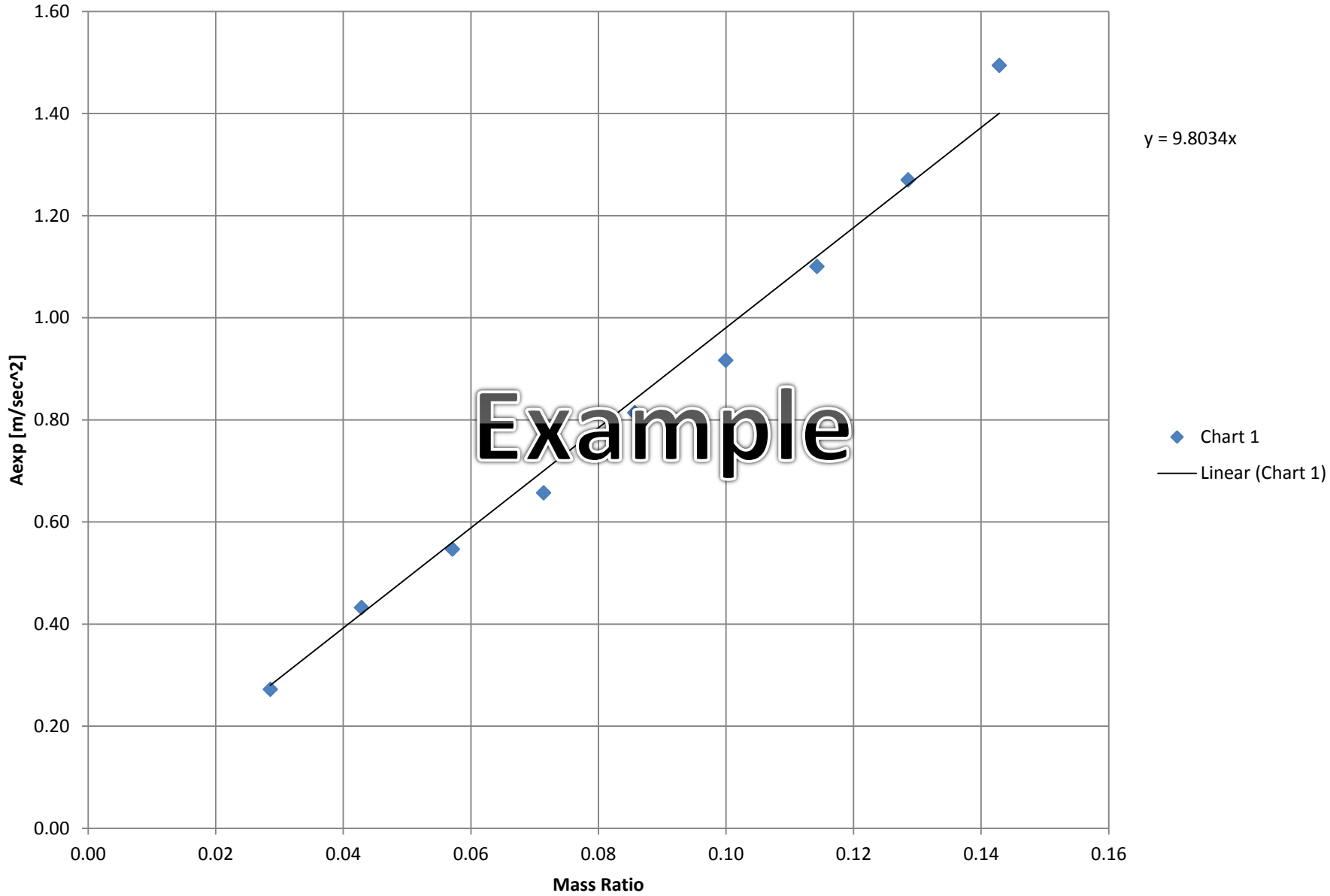


Chart 2: Atheo vs. Mass Ratio

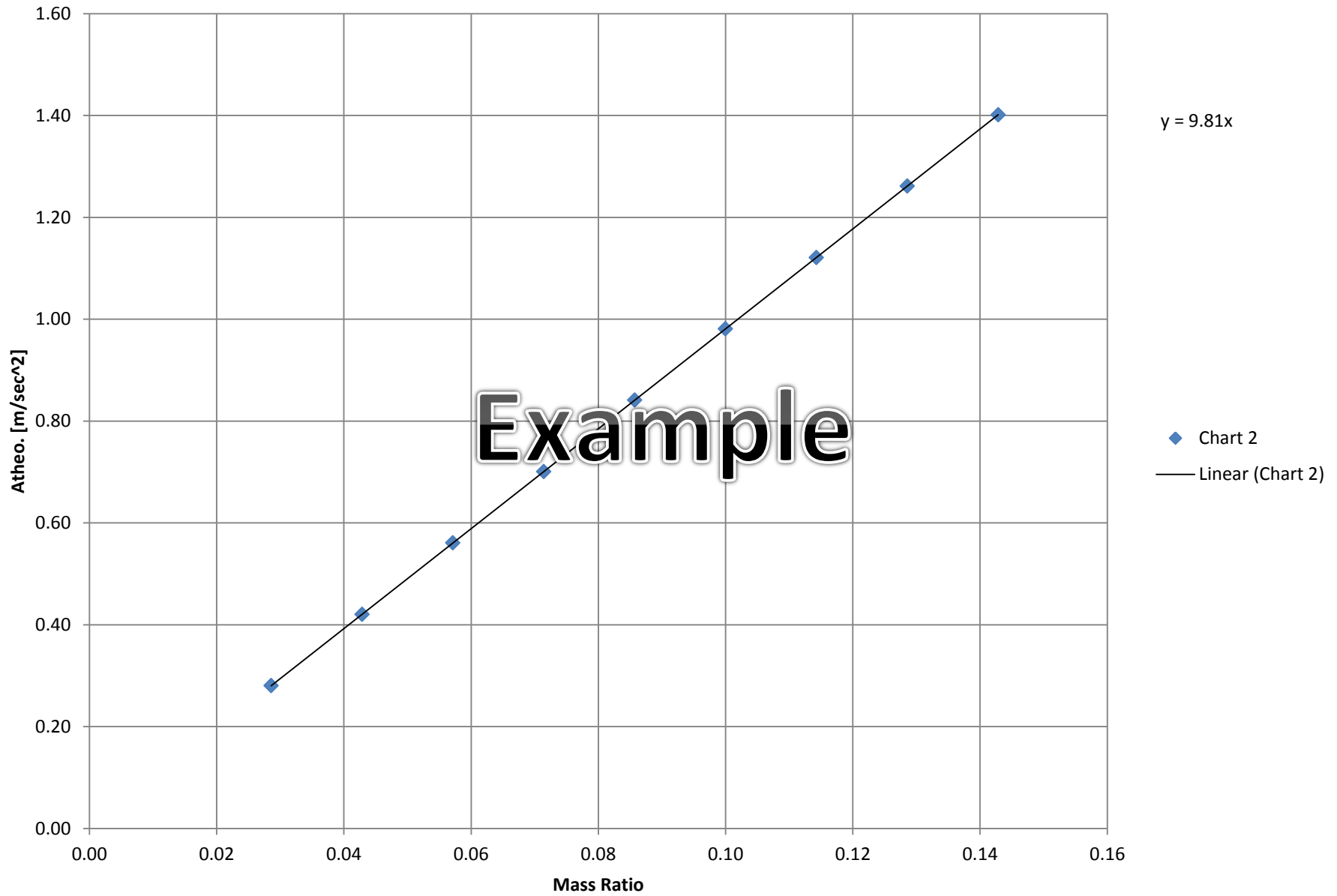


Chart 3: Aexp vs. M1

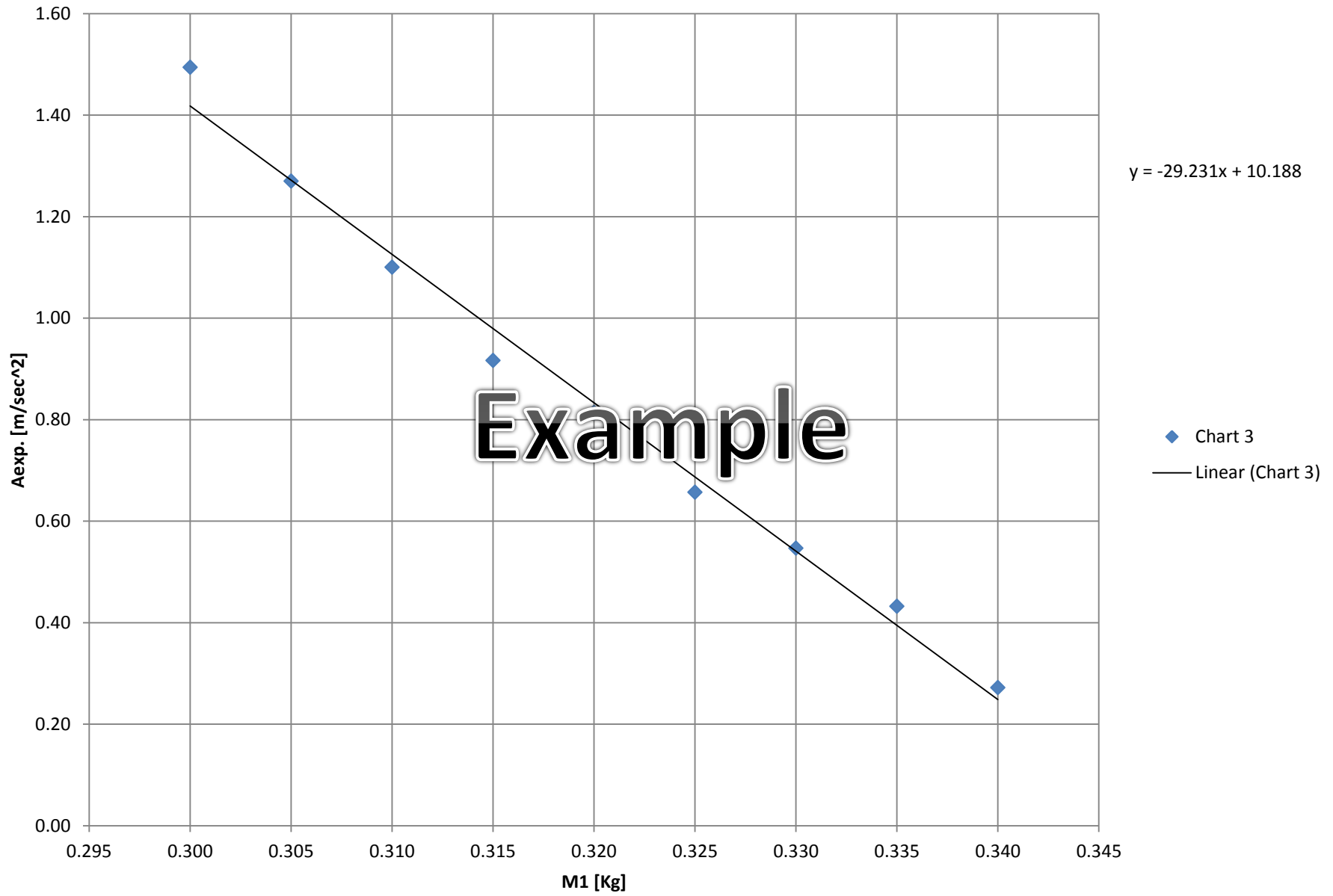


Chart 4: Atheo vs. M1

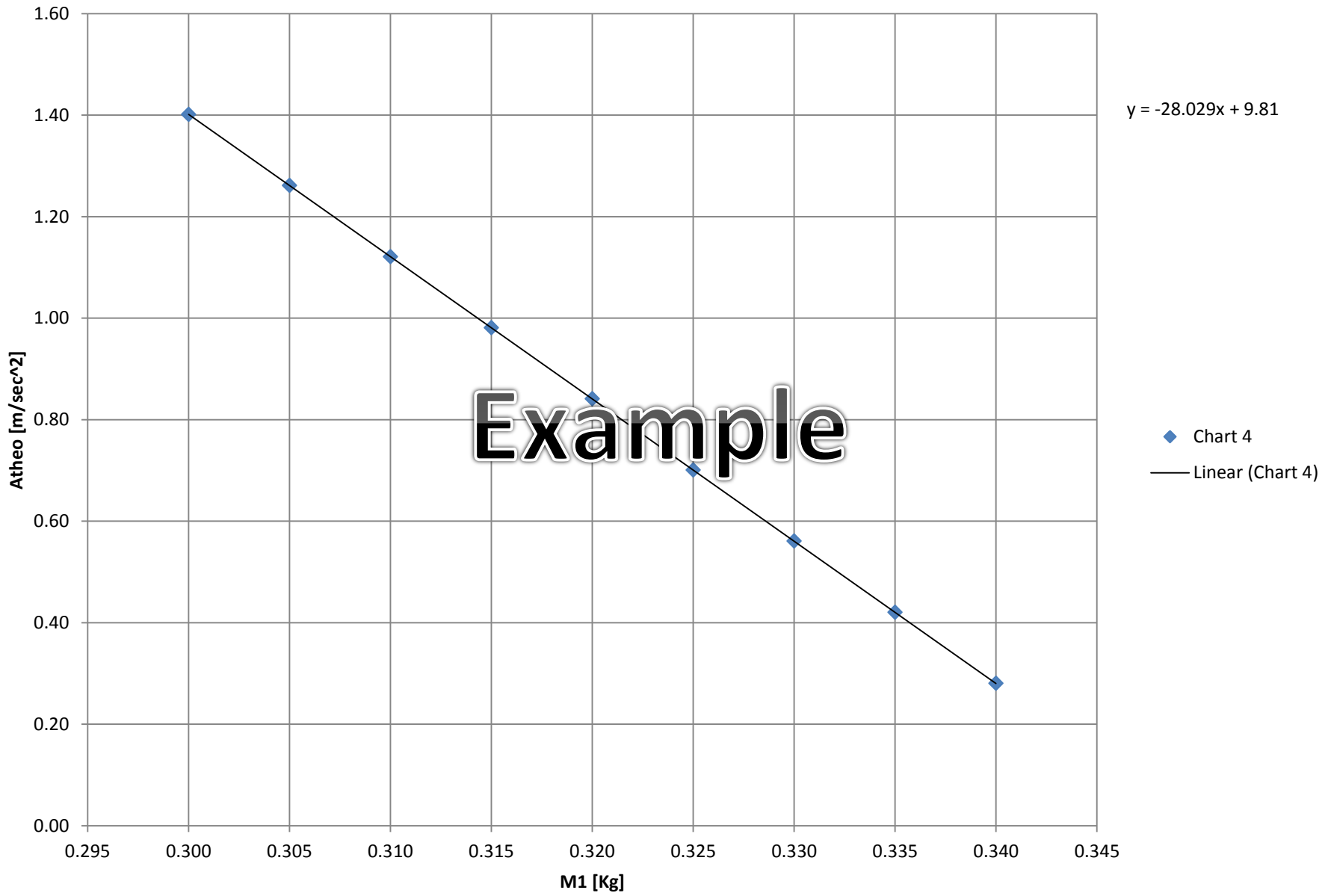


Chart 5: Aexp vs. M2

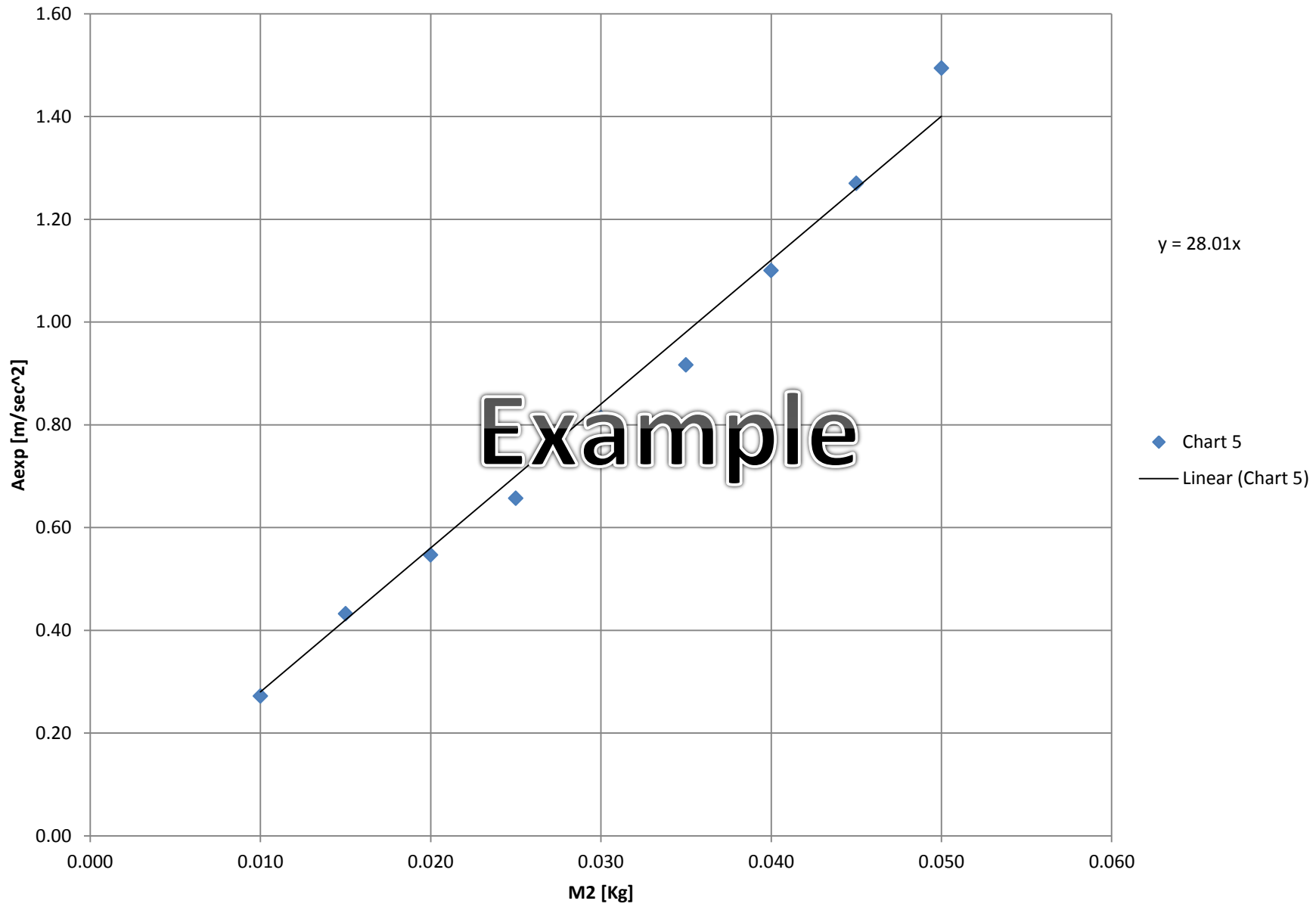


Chart 6: Atheo vs. M2

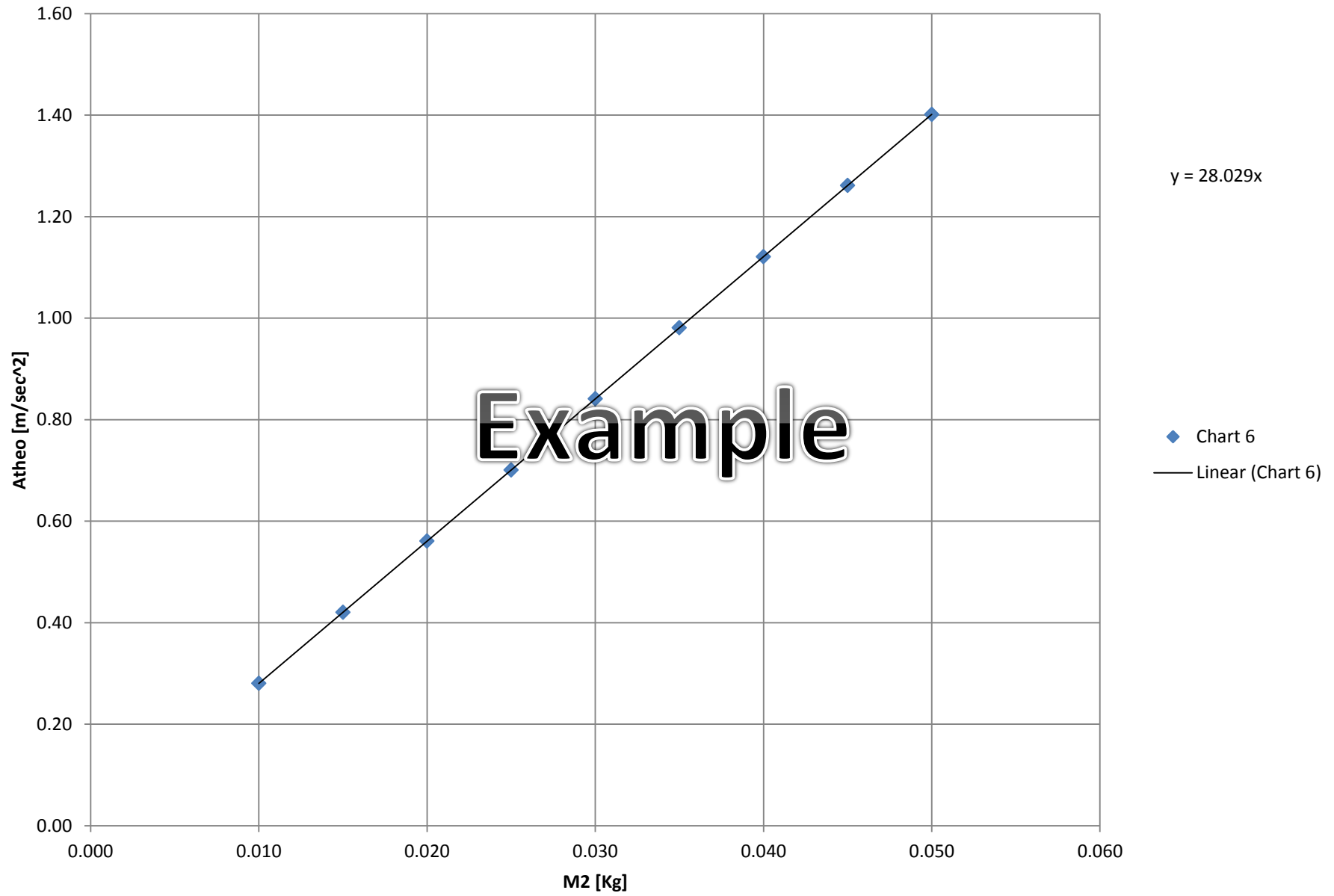


Chart 7: Accelerating Force vs Exp. Acceleration

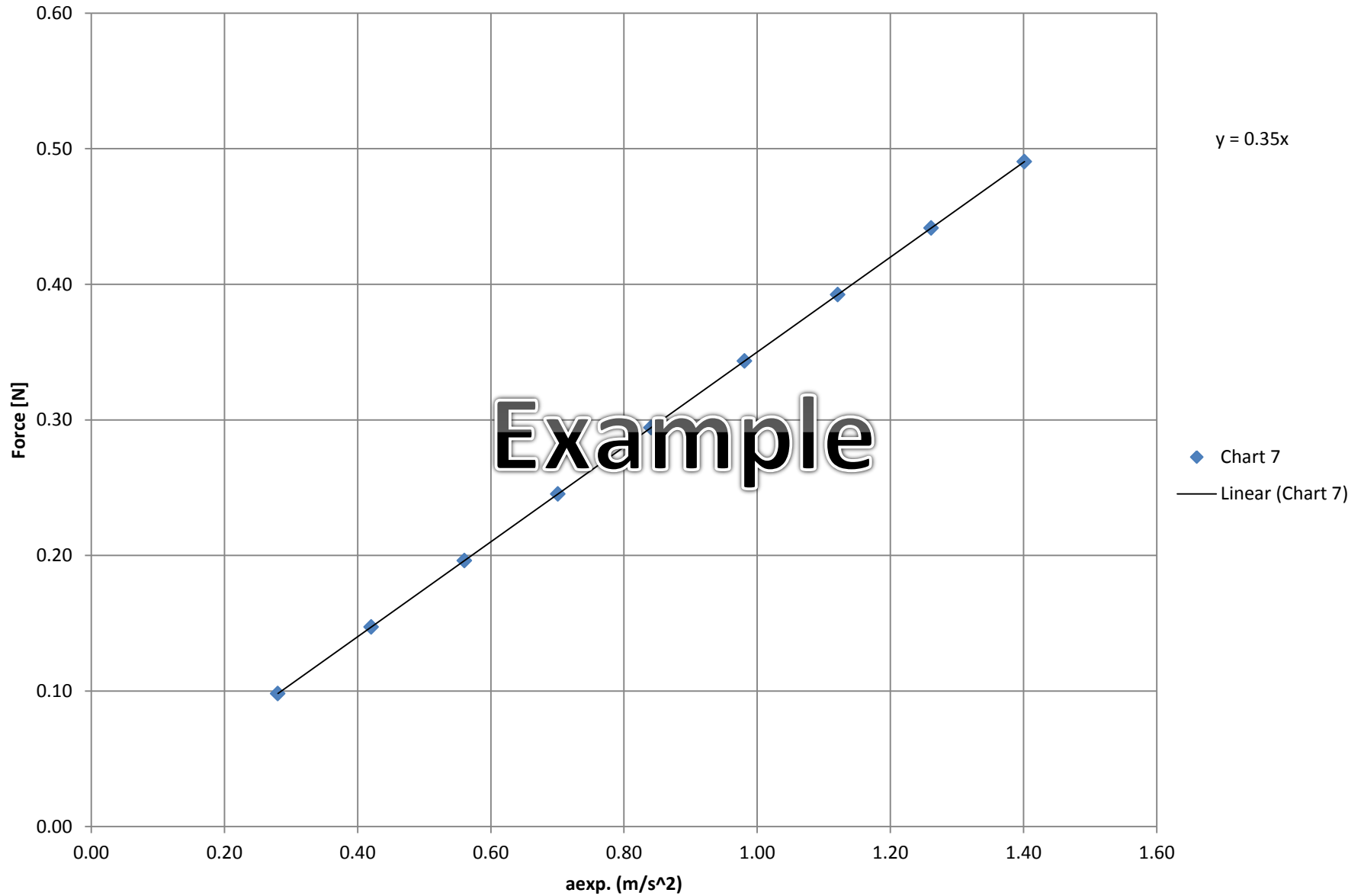


Chart 8: Accelerating Force vs. Theoretical Acceleration

