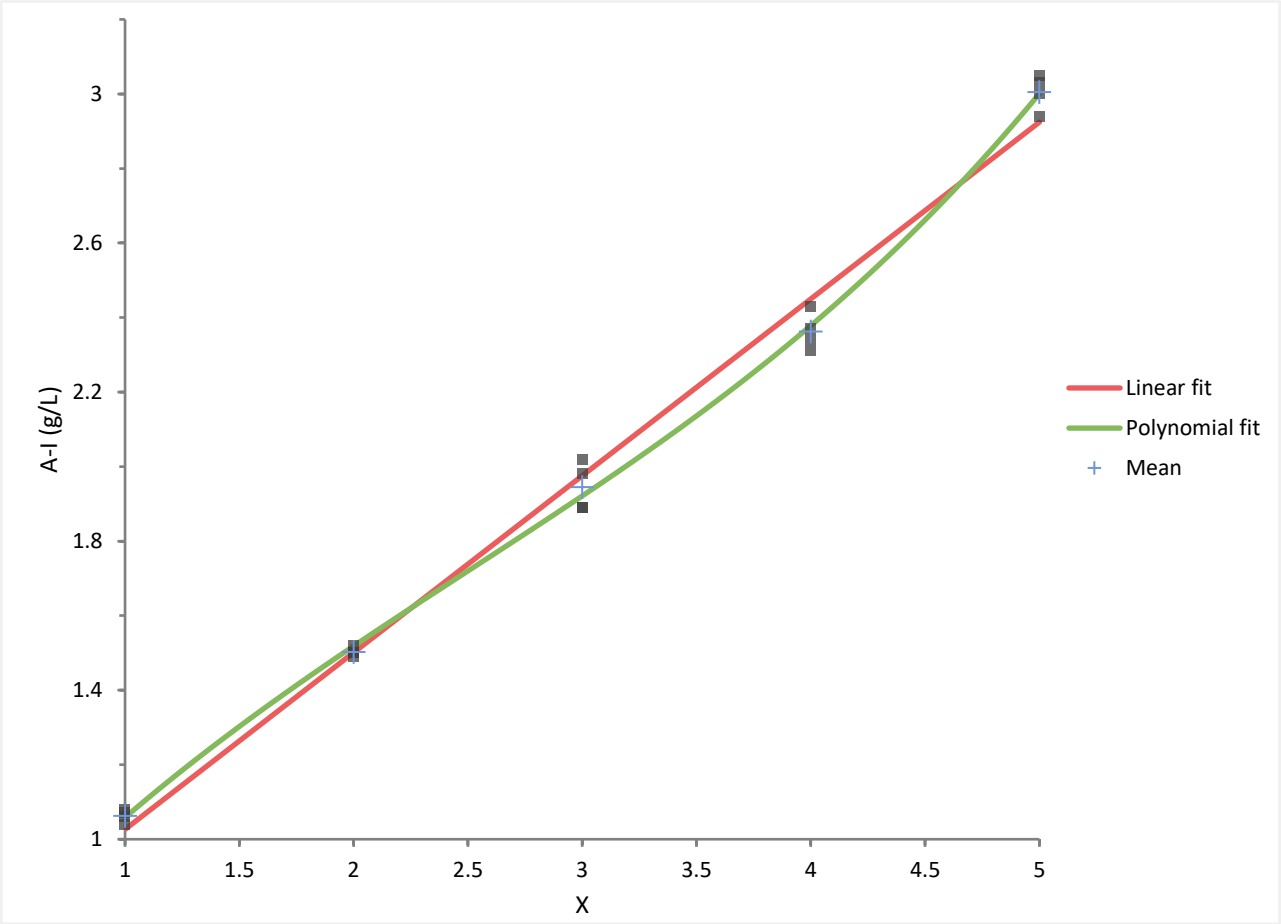


Emancipator Kroll Example 3

Filter: No filter

Last updated 10 September 2026 at 14:24 by Analyse-it Software, Ltd.

Descriptives



N

Design

20

5 X x 4 Observations

Measuring interval

1.063 to 3.005

Linearity

X	Linear fit	Nonlinear fit (3rd order polynomial)	Nonlinearity	95% CI	Relative nonlinearity
1	1.027	1.059	0.032	0.002 to 0.062	3.1%
2	1.501	1.518	0.017	-0.016 to 0.051	1.2%
3	1.976	1.921	-0.054	-0.080 to -0.028	-2.7%
4	2.450	2.378	-0.072	-0.105 to -0.038	-2.9%
5	2.925	3.001	0.077	0.046 to 0.107	2.6%

Fit Model

Linear fit

RMSE		0.072				
Parameter	Estimate	SE	t	DF	p-value	
Constant	0.5520	0.037994	-	-	-	
X	0.4745	0.011456	-	-	-	
Source	SS	DF	MS	F	p-value	
Lack of fit	0.065	3	0.022	11.28	0.0004 ¹	
Pure error	0.029	15	0.002			
Model error	0.094	18	0.005			

¹ Lack of fit at the 5% significance level.

3rd order polynomial fit

RMSE		0.046				
Parameter	Estimate	SE	t	DF	p-value	
Constant	0.4305	0.11242	-	-	-	
X	0.7492	0.14695	-	-	-	
X ²	-0.1397	0.054544	-2.56	16	0.0209	
X ³	0.01854	6.0224E-03	3.08	16	0.0072	
Source	SS	DF	MS	F	p-value	
Lack of fit	0.004	1	0.004	2.27	0.1523	
Pure error	0.029	15	0.002			
Model error	0.033	16	0.002			