

Original Data Set

x	y	
0.56	1.02	
1.02	2.45	$y_{\text{unknown}} = 11.1$
3.45	6.63	
9.84	19.8	
22.3	42.1	

D = 1655.25 $s_y = 0.61025$ $R^2 = 0.99905$	value	std. dev.	% relative uncertainty
m	1.8860	0.034	1.7784
b	0.3795	0.370	97.395
x	5.6843	0.35582	6.2597

95% Confidence Intervals		t =	3.1824
m=	1.886	+/-	0.1067
b=	0.3795	+/-	1.1764
$x_{\text{unk}}=$	5.6843	+/-	1.1324

"New" Data Set

x	y	
1.04	0.020	
5.20	0.094	$y_{\text{unknown}} = 0.241$
10.40	0.240	
26.00	0.490	
52.00	1.100	
104.00	2.020	

D = 46535 $s_y = 0.04411$ $R^2 = 0.9974$	value	std. dev.	% relative uncertainty
m	0.0196	0.000501	2.559
b	0.0127	0.02448	192.1
x	11.6632	2.4956	21.4

95% Confidence Intervals		t =	2.776
m=	0.01957	+/-	0.001390
b=	0.01274	+/-	0.06797
$x_{\text{unk}}=$	11.663	+/-	6.929