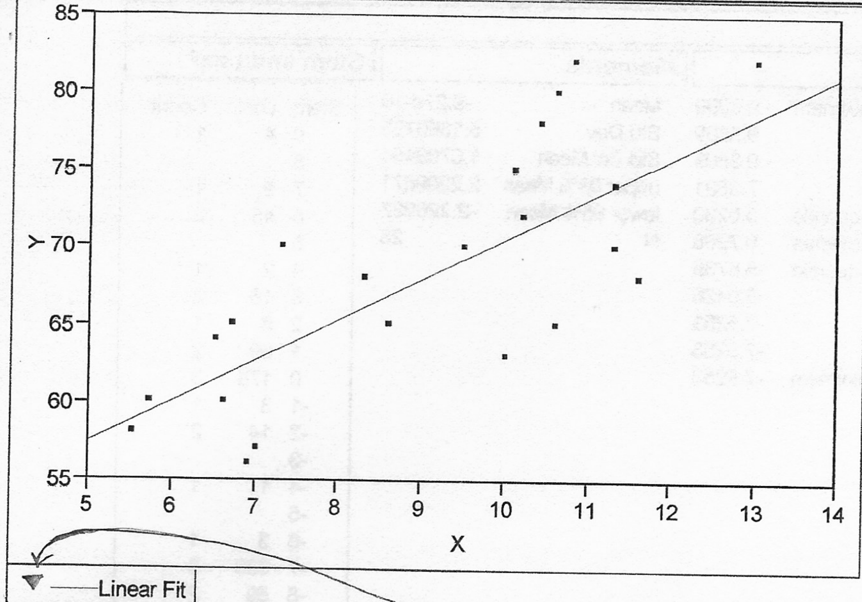
Bivariate Fit of Y By X



Rows	X	Y	Residuals Y
1	5.5	58	-0.7477993
2	5.7	60	0.72875421
3	6.5	64	2.63496842
4	6.6	60	-1.6267548
5	6.7	65	3.11152197
6	6.9	56	-6.4119245
7	7	57	-5.6736477
8	7.3	70	6.54118263
9	8.3	68	1.92395039
10	8.6	65	-1.8612193
11	9.5	70	0.7832717
12	10	63	-7.5253444
13	10.1	75	4.21293236
14	10.2	72	0.95120914
15	10.4	78	6.42776269
16	10.6	65	-7.0956838
17	10.6	80	7.90431624
18	10.8	82	9.38086979
19	11.3	70	-3.9277463
20	11.3	74	0.07225367
21	11.6	68	-6.712916
22	11.6	68	-6.712916
23	13	82	3.62295887

Linear Fit

Y = 44.353022 + 2.6172322 X

Summary of Fit

RSquare	0.55646
RSquare Adj	0.535339
Root Mean Square Error	5.256939
Mean of Response	68.26087
Observations (or Sum Wgts)	23

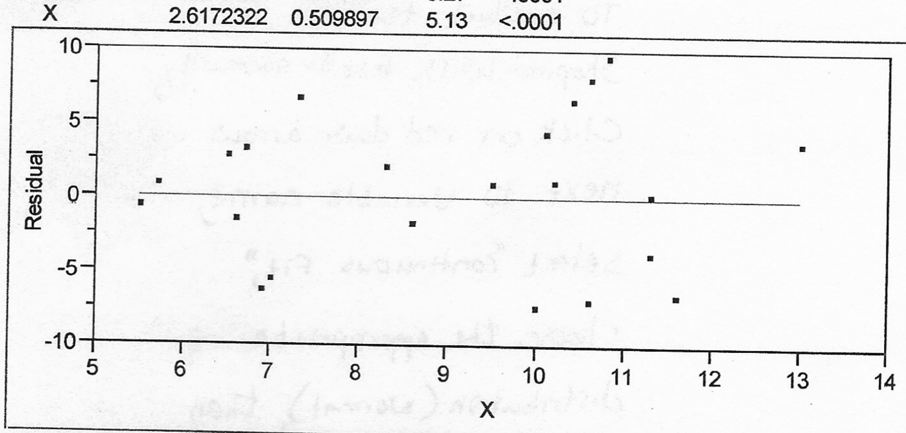
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	728.0913	728.091	26.3463
Error	21	580.3435	27.635	Prob > F
C. Total	22	1308.4348		<.0001

Parameter Estimates

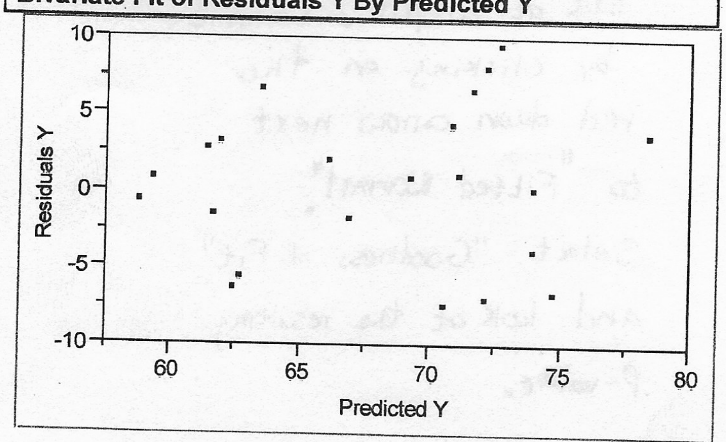
Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	44.353022	4.78504	9.27	<.0001
X	2.6172322	0.509897	5.13	<.0001

NOTE: Click on red down arrow, then "Save Residuals". The e_i's will be written in data file. Then follow Pictorial and Numerical Summary of Univariate Data on first page of JMP HANDOUT to get plots of residuals. Alternatively, click on red down arrow, then "Plot Residuals".



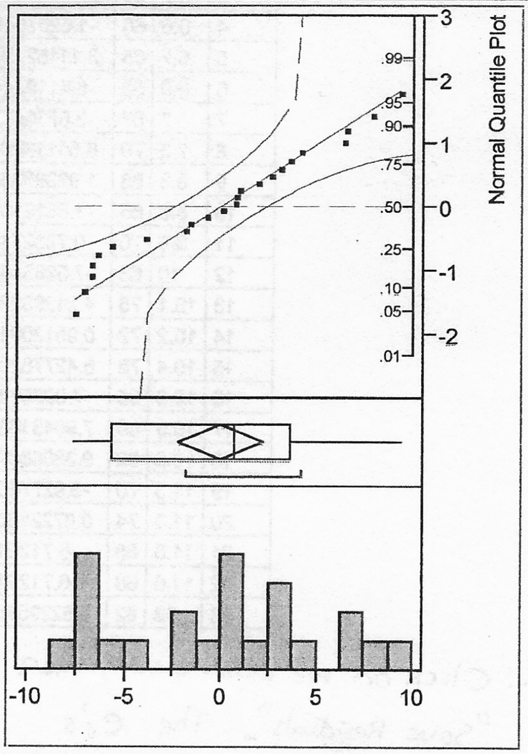
why are these plots similar?

Bivariate Fit of Residuals Y By Predicted Y



Distributions

Residuals Y



Quantiles

100.0%	maximum	9.3809
99.5%		9.3809
97.5%		9.3809
90.0%		7.3591
75.0%	quartile	3.6230
50.0%	median	0.7288
25.0%	quartile	-5.6736
10.0%		-6.9426
2.5%		-7.5253
0.5%		-7.5253
0.0%	minimum	-7.5253

Moments

Mean	-9.27e-16
Std Dev	5.1360735
Std Err Mean	1.0709454
upper 95% Mean	2.2209871
lower 95% Mean	-2.220987
N	23

Stem and Leaf

Stem	Leaf	Count
9	4	1
8		
7	9	1
6	45	2
5		
4	2	1
3	16	2
2	6	1
1	09	2
0	178	3
-1	3	1
-2	14	2
-3		
-4	1	1
-5		
-6	3	1
-7	336	3
-8	59	2

Fitted Normal

Parameter Estimates

Type	Parameter	Estimate	Lower 95%	Upper 95%
Location	Mu	-0.000000	-2.221005	2.221005
Dispersion	Sigma	5.136074	3.972213	7.269349

Goodness-of-Fit Test

Shapiro-Wilk W Test

W	Prob<W
0.948275	0.2717

NOTE: Click on Analyze, Distribution, and then select the Residuals column. To conduct the Shapiro-Wilk test for normality, Click on red down arrow next to Variable name, select "Continuous Fit," Choose the appropriate distribution (Normal), then look at output. Continue by clicking on the red down arrow next to "Fitted Normal". Select "Goodness of Fit" and look at the resulting p-value.