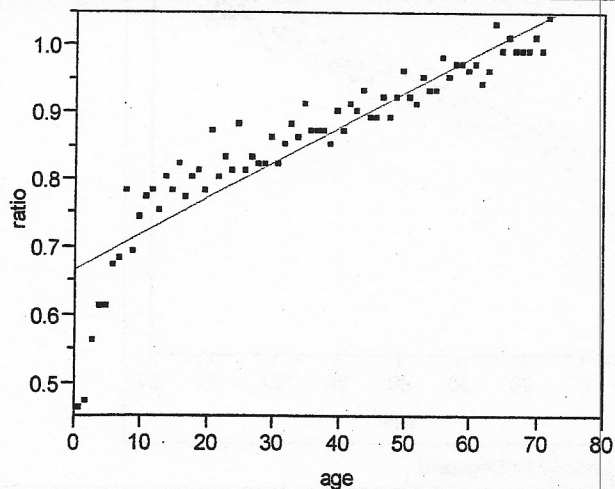


Bivariate Fit of ratio By age



Linear Fit

Linear Fit

$$\text{ratio} = 0.6656231 + 0.0052759 \text{ age}$$

Summary of Fit

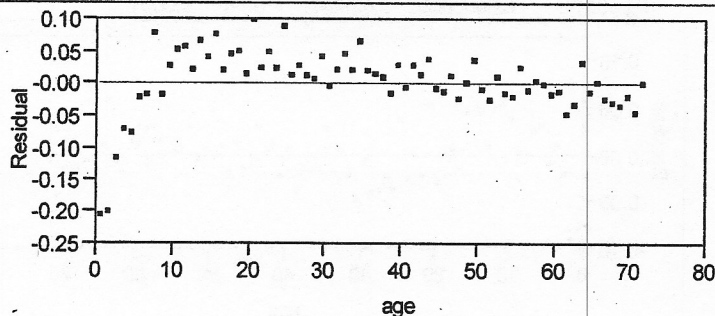
RSquare	0.822535
RSquare Adj	0.819999
Root Mean Square Error	0.051653
Mean of Response	0.855556
Observations (or Sum Wgts)	72

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.8656172	0.865617	324.4433
Error	70	0.1867605	0.002668	Prob > F
C. Total	71	1.0523778		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	0.6656231	0.012176	54.67	<.0001
age	0.0052759	0.000293	18.01	<.0001



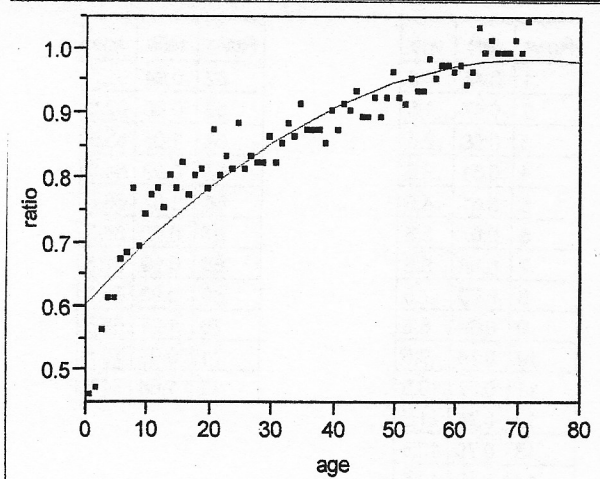
Growth

Rows	ratio	age
1	0.46	0.5
2	0.47	1.5
3	0.56	2.5
4	0.61	3.5
5	0.61	4.5
6	0.67	5.5
7	0.68	6.5
8	0.78	7.5
9	0.69	8.5
10	0.74	9.5
11	0.77	10.5
12	0.78	11.5
13	0.75	12.5
14	0.80	13.5
15	0.78	14.5
16	0.82	15.5
17	0.77	16.5
18	0.80	17.5
19	0.81	18.5
20	0.78	19.5
21	0.87	20.5
22	0.80	21.5
23	0.83	22.5
24	0.81	23.5
25	0.88	24.5
26	0.81	25.5
27	0.83	26.5
28	0.82	27.5
29	0.82	28.5
30	0.86	29.5
31	0.82	30.5
32	0.85	31.5
33	0.88	32.5
34	0.86	33.5
35	0.91	34.5
36	0.87	35.5
37	0.87	36.5
38	0.87	37.5
39	0.85	38.5
40	0.90	39.5
41	0.87	40.5
42	0.91	41.5
43	0.90	42.5
44	0.93	43.5
45	0.89	44.5
46	0.89	45.5
47	0.92	46.5
48	0.89	47.5
49	0.92	48.5
50	0.96	49.5
51	0.92	50.5
52	0.91	51.5
53	0.95	52.5
54	0.93	53.5
55	0.93	54.5
56	0.98	55.5
57	0.95	56.5
58	0.97	57.5
59	0.97	58.5
60	0.96	59.5
61	0.97	60.5

Growth

Rows	ratio	age
62	0.94	61.5
63	0.96	62.5
64	1.03	63.5
65	0.99	64.5
66	1.01	65.5
67	0.99	66.5
68	0.99	67.5
69	0.99	68.5
70	1.01	69.5
71	0.99	70.5
72	1.04	71.5

Bivariate Fit of ratio By age



— Polynomial Fit Degree=2

Polynomial Fit Degree=2

$$\text{ratio} = 0.6973133 + 0.0052759 \text{ age} - 0.0000734 (\text{age}-36)^2$$

Summary of Fit

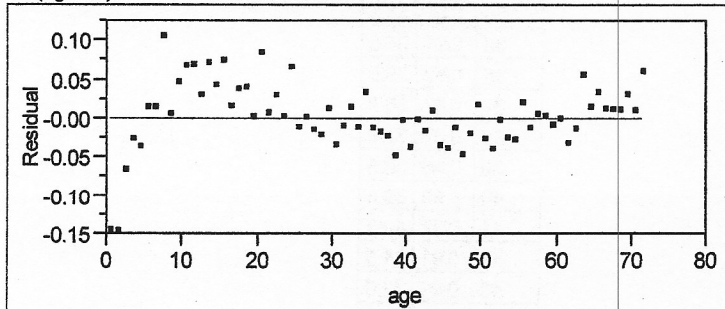
RSquare	0.87747
RSquare Adj	0.873918
Root Mean Square Error	0.04323
Mean of Response	0.855556
Observations (or Sum Wgts)	72

Analysis of Variance

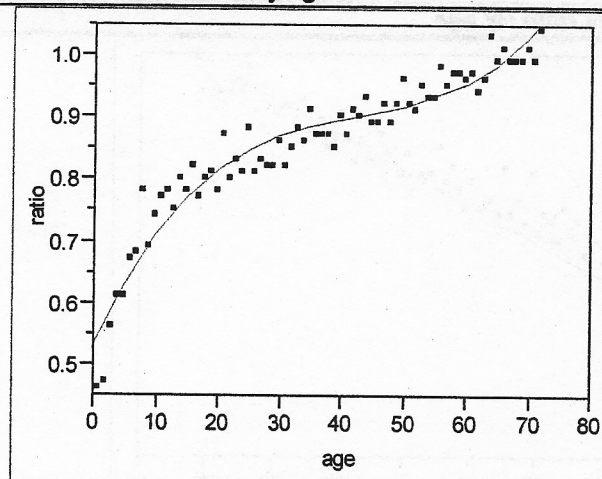
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	2	0.9234299	0.461715	247.0636
Error	69	0.1289479	0.001869	Prob > F
C. Total	71	1.0523778		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	0.6973133	0.011675	59.73	<.0001
age	0.0052759	0.000245	21.52	<.0001
(age-36)^2	-0.000073	0.000013	-5.56	<.0001



Bivariate Fit of ratio By age



— Polynomial Fit Degree=3

Polynomial Fit Degree=3

$$\text{ratio} = 0.8040372 + 0.0023113 \text{ age} - 0.0000734 (\text{age}-36)^2 + 0.0000038 (\text{age}-36)^3$$

Summary of Fit

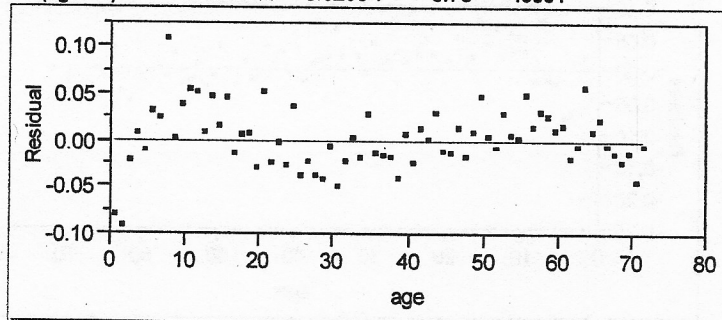
RSquare	0.926858
RSquare Adj	0.923631
Root Mean Square Error	0.033645
Mean of Response	0.855556
Observations (or Sum Wgts)	72

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	3	0.9754046	0.325135	287.2323
Error	68	0.0769731	0.001132	Prob > F
C. Total	71	1.0523778		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	0.8040372	0.018183	44.22	<.0001
age	0.0023113	0.000477	4.84	<.0001
(age-36)^2	-0.000073	0.00001	-7.15	<.0001
(age-36)^3	0.0000038	5.629e-7	6.78	<.0001



- Analyze

- Fit Y by X

Click on red down arrow next to "Bivariate Fit of Y by X" and click on black right arrow next to "Fit Polynomial" in order to select polynomial.

Extra Information

Growth: Multivariate

Multivariate

Correlations

	age	age^2	age^3	age-36	(age-36)^2	(age-36)^3
age	1.0000	0.9683	0.9166	1.0000	-0.0000	0.9166
age^2	0.9683	1.0000	0.9860	0.9683	0.2499	0.8875
age^3	0.9166	0.9860	1.0000	0.9166	0.3943	0.8668
age-36	1.0000	0.9683	0.9166	1.0000	-0.0000	0.9166
(age-36)^2	-0.0000	0.2499	0.3943	-0.0000	1.0000	-0.0000
(age-36)^3	0.9166	0.8875	0.8668	0.9166	-0.0000	1.0000