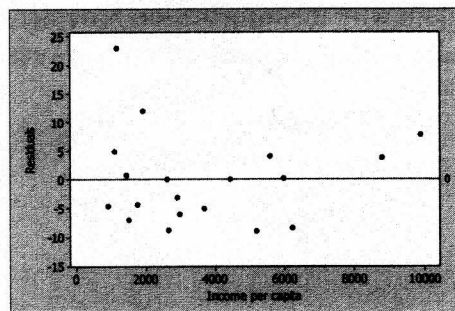
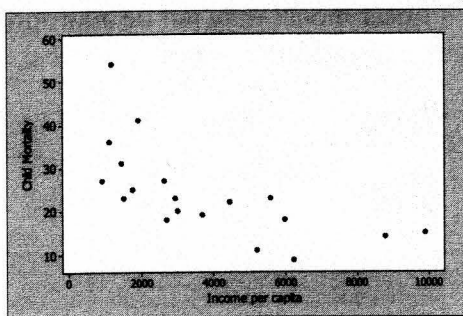


What is the relationship between per capita income in a country and child mortality? On this page is computer output for three different regression models examining this relationship for countries in Central and South America. Child mortality is measured in deaths before age 5 per 1000 children born, and income is measured in U.S. dollars per person. Questions about these data are on the next page. All logarithms are base 10.

I. Child mortality *versus* Income

Predictor	Coef	SE Coef	T	P
Constant	34.149	3.397	10.05	0.000
Income per capita	-0.0027295	0.0007530	-3.62	0.002

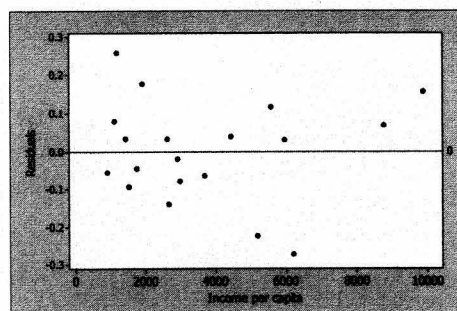
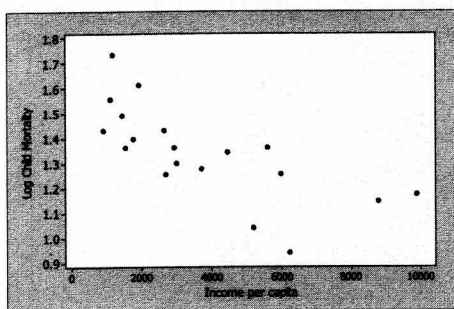
S = 8.35744 R-Sq = 43.6% R-Sq(adj) = 40.3%



II. Log child mortality *versus* Income

Predictor	Coef	SE Coef	T	P
Constant	1.53434	0.05580	27.50	0.000
Income per capita	-0.00005198	0.00001237	-4.20	0.001

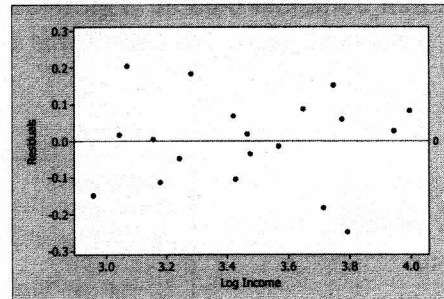
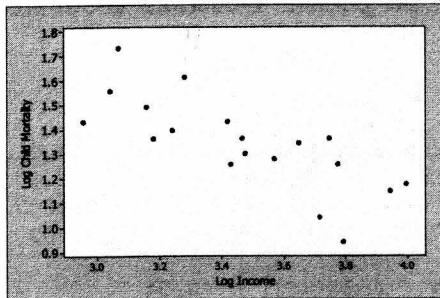
S = 0.137280 R-Sq = 51.0% R-Sq(adj) = 48.1%



III. Log child mortality
versus Log income

Predictor	Coef	SE Coef	T	P
Constant	2.9649	0.3299	8.99	0.000
Log Income	-0.46824	0.09476	-4.94	0.000

S = 0.125578 R-Sq = 59.0% R-Sq(adj) = 56.5%



1. Explain why the information provided suggests that a linear model may not be appropriate for describing the relationship between Child mortality and Income in these countries.
2. Would an exponential model or a power model provide a better description of this relationship? Use the information provided to justify your answer.