b. Using only the pairs of values for the 4 points in the lower left corner, find the equation of the regression line.

c. Using only the pairs of values for the 4 points in the upper right corner, find the equation of the regression line.

d. Compare the results from parts (a), (b), and (c).

Regression and Predictions.   *Exercises 13–28 use the same data sets as Exercises 13–28 in Section 10-2. In each case, find the regression equation, letting the first variable be the predictor (x) variable. Find the indicated predicted value by following the prediction procedure summarized in Figure 10-5.*

13. Lemons and Car Crashes Find the best predicted crash fatality rate for a year in which there are 500 metric tons of lemon imports.

Lemon Imports	230	265	358	480	530
Crash Fatality Rate	15.9	15.7	15.4	15.3	14.9

14. PSAT and SAT Scores One subject not included in the given table had a PSAT score of 229. Find the best predicted SAT score for this student. Is the result close to the reported value of 2400? Given that the data are from volunteered responses, are the results valid?

PSAT	183	207	167	206	197	142	193	176
SAT	2200	2040	1890	2380	2290	2070	2370	1980

15. Campus Crime Find the best predicted number of burglaries for Ohio State, which had an enrollment of 51,800 students. Is the predicted value close to 329, which was the actual number of burglaries?

Enrollment	32	31	53	28	27	36	42	30	34	46
Burglaries	103	103	86	57	32	131	157	20	27	161

16. Altitude and Temperature At 6327 ft (or 6.327 thousand feet), the author recorded the temperature. Find the best predicted temperature at that altitude. How does the result compare to the actual recorded value of 48°F?

Altitude	3	10	14	22	28	31	33
Temperature	57	37	24	−5	−30	−41	−54

17. Town Courts The court for the town of Beekman had income of $83,941 (or $83.941 thousand). Find the best predicted salary for the justice. Is the result close to the actual salary of $26,088?

Court Income	65	404	1567	1131	272	252	111	154	32
Justice Salary	30	44	92	56	46	61	25	26	18

18. Auction Bids An item not included in the table is a pair of New York Knicks tickets. The auctioneer started the bidding at $300. Find the best predicted winning bid. Is the result close to the actual winning bid of $250?

Opening Bid	1500	500	500	400	300
Winning Bid	650	175	125	275	125