

CHAPTER 12 — even HW

HW #2

14. a) $\hat{y} = 560.65 - 3.0771x$ $\hat{y}$: predicted calories consumed
 x : time spent at table

slope: for each additional minute at the table, the predicted number of calories will decrease by about 3.0771 calories

y-intercept: if there is no time spent at the table, the predicted number of calories consumed would be about 560.65

b) when using time at the table to predict number of calories, the actual number of calories will typically vary from the predicted calories by about 23.3980 calories.

c) S: $H_0: \beta = 0$ vs. $H_a: \beta \neq 0$

β : slope of population regression line relating calorie consumption to time at the table in the population of toddlers

P: t test for β

D: $t = -3.62$

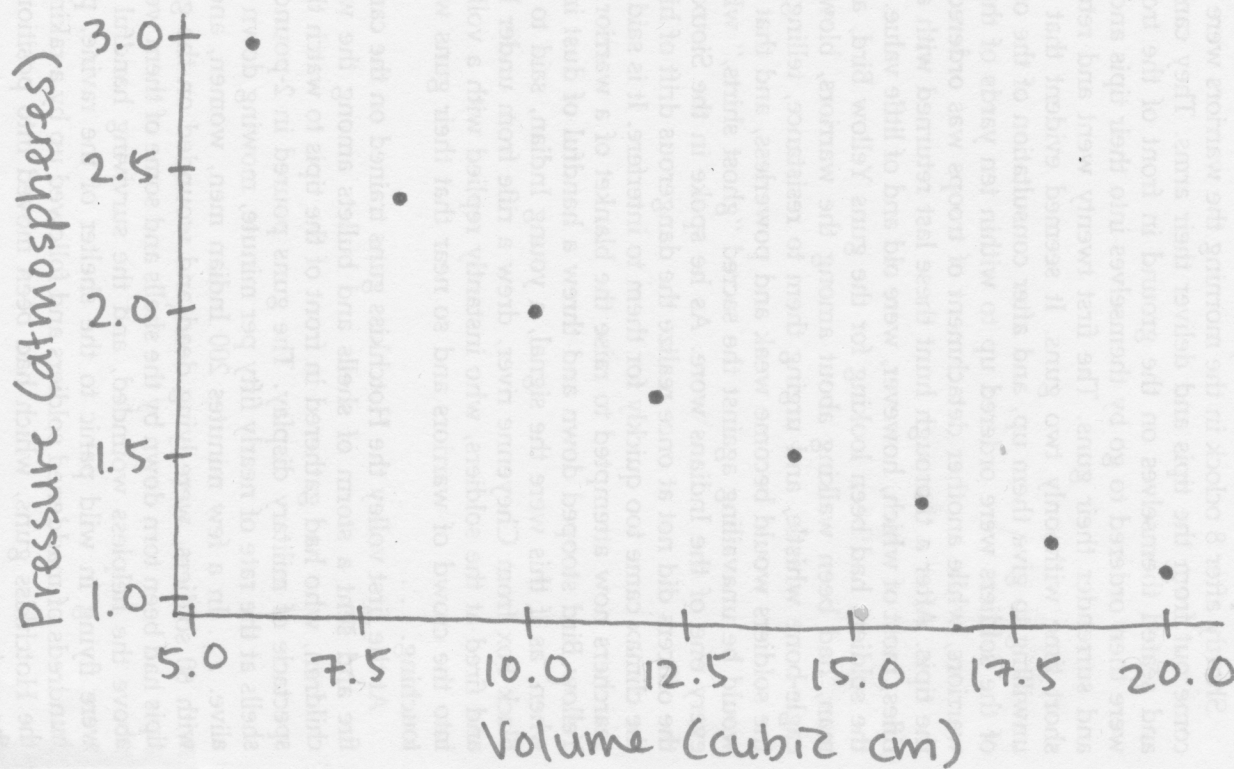
p-value = 0.002

C: B/c P-value = 0.002 < $\alpha = 0.01$, we reject H_0 .

There is convincing evidence of a linear relationship between time at the table and calorie consumption in the population of toddlers.

HW #3

32. a) The scatterplot shows a strong, negative, curved association between volume and pressure.



- b) The students used the reciprocal of $x = \text{volume}$.
c) The students used the reciprocal of $y = \text{pressure}$.

50. D

