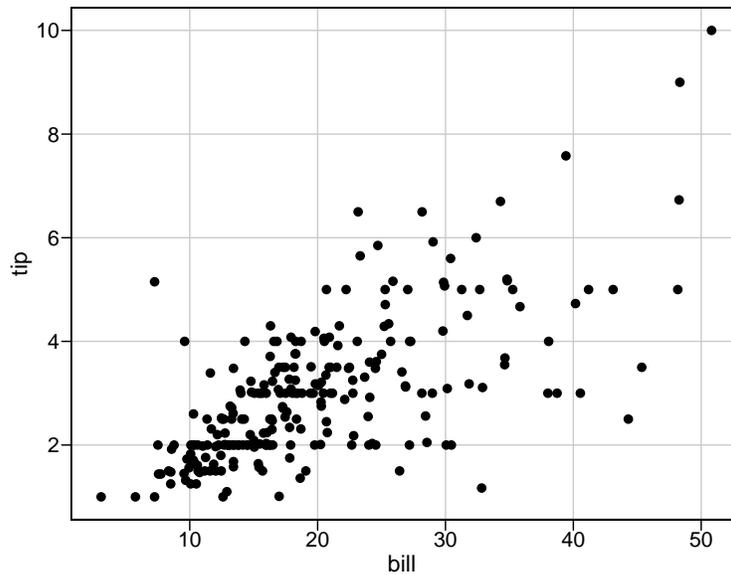


Stat101 Worksheet Regression

Name:
Section:

In one restaurant, a food server recorded the following data on all customers they had served during a interval of two and a half months in early 1990. The restaurant, located in a suburban shopping mall, was one of a national chain and served a varied menu. In observance of local law the restaurant offered seating in a non-smoking sections to patrons who requested it. The data was reported in a collection of case studies for business statistics by Bryant and Smith (1995).



	Mean	Std dev
Tips	3.00	1.38
Total Bill	19.79	8.90

$r=0.68$

1. Calculate the slope of the regression line:

$$b_1 = r \frac{s_y}{s_x} =$$

2. Calculate the intercept of the regression line:

$$b_0 = \bar{y} - b_1 \bar{x} =$$

3. Compute R^2 .