

Math 21 – Chapter 4 Project

1) Here are the number of hours that ten students spent studying for a final exam, and their score on that exam.

Hours	7	8	4	9	13	5	9	6	16	3
Score	70	76	57	77	91	66	82	64	96	50

- Compute the correlation coefficient r .
- What is the p -value?
- Determine whether there is a linear association between hours studied and exam score. If so, is it positive or negative?

2) Here are the scores of five randomly selected students on Test 1 and Test 2 in a math class.

Student	Test 1 Score	Test 2 Score
<i>1</i>	83	82
<i>2</i>	82	84
<i>3</i>	76	63
<i>4</i>	92	83
<i>5</i>	71	55

- Is there a linear association between Test 1 scores and Test 2 scores?
- Find the equation of the regression line, treating the score on Test 1 as x and the score on Test 2 as y .
- What is the slope of the line? What does the slope tell you?
- Predict the Test 2 score for a student who had a score of 80 on Test 1.