

STAT100 Elementary Statistics and Probability Summer II 2014

Quiz 1, Wednesday, July 16, 2014

Name: _____

Show all work clearly and in order, and circle your final answers. Justify your answers algebraically whenever possible. You are allowed to calculator for basic calculation in this quiz. You have 15 minutes to take this 10 point quiz.

The following data records year (x) and price (y)

Year x	2010	2011	2012	2013	2014
Price y	36	34	37	38	40

1. (3 points) Find the mean, variance and standard deviation of the price data y .

2. (3 points) Find the interquartile range of the price data y .
Hint: The interquartile range is defined by $Q_3 - Q_1$.

3. (4 points) Find the correlation coefficient between time and price. Do they have a strong linear relation? Explain why.