

Your Name: _____

Math 140: Statistics, March 13, 2008
Quiz 9, Chapter 11 and Chapter 12, Section 2 & 3

In a hypothetical study, the following results were obtained:

Age 20: Average = 100, SD = 12
Age 50: Average = 90, SD = 15, $r = 0.8$

Use these results to answer the first two questions.

1. (4 pts.) Using the scores at age 20 to estimate the scores at age 50, what is the r.m.s. error of the line?

2. (6 pts.) Assume you must estimate the score at age 50 without knowing the score at age 20.

a) What would you estimate?

b) What is the r.m.s. error of your estimate?

3. (2 pts.) Give the error for the following

Estimated value of y	Actual value of y	Error
10	12	
12	11	

4. (3 pts.) A regression line for predicting scores has an r.m.s. error of 12 points. About _____ percent of the time, the predictions will be right to within 12 points.

Pledged: _____