

Your Name: _____

Math 140: Statistics, March 6, 2008
Quiz 7, Chapter 9 & Chapter 10, Sections 1 & 2

1. (8 pts.) The correlation coefficient for x and y is 0.7857. For each of the remaining tables, identify those that have the same correlation coefficient and explain why. You should not actually calculate the correlation coefficient.

x	y
1	2
2	3
3	1
4	4
5	6
6	5
7	7

$x1$	$y1$
1	4
2	6
3	2
4	8
5	12
6	10
7	14

$x2$	$y2$
1	-2
2	-1
3	-3
4	0
5	2
6	1
7	3

$x3$	$y3$
1	-2
2	-3
3	-1
4	-4
5	-6
6	-5
7	-7

$x4$	$y4$
2	1
3	2
1	3
4	4
6	5
5	6
7	7

- a) $x1$ and $y1$
- b) $x2$ and $y2$
- c) $x3$ and $y3$
- d) $x4$ and $y4$
2. (9 pts.) Given that average education is 14 years with an SD of 2.5 years, average income is \$30,000 with an SD of \$20,000, and r is 0.3, estimate the following
- a) income with 16 years of education
- b) income with 10 years of education
- c) income knowing nothing about education

Pledged: _____