

INFS 614 – Quiz #2
09/25/07

Name: _____ G#: _____

S1

<u>sid</u>	sname	rating	age
22	dustin	7	45.0
31	lubber	8	55.5
58	rusty	10	35.0

S2

<u>sid</u>	sname	rating	age
28	yuppy	9	35.0
31	lubber	8	55.5
44	guppy	5	35.0
58	rusty	10	35.0

R1

<u>sid</u>	<u>bid</u>	<u>day</u>
22	101	10/10/96
58	103	11/12/96

1. $\pi_{sname, rating}(\sigma_{rating > 8}(S2)) =$

yuppy 9
rusty 10

2. What does it take for two tables to be “union-compatible?”

They must have the same number of fields (attributes), and the corresponding fields must have the same domains.

3. Are S1 and S2 union-compatible? If so, what’s the result of $S1 \cup S2$? If not, why not?

Yes.

22	dustin	7	45.0
31	lubber	8	55.5
58	rusty	10	35.0
28	yuppy	9	35.0
44	guppy	5	35.0

4. Using S1 and R1, write a relational algebra query that finds the name of the sailor that reserved boat 101.

$$\pi_{sname} ((\sigma_{bid=101} R1) \bowtie S1)$$