

Date:

Name 1:

Name 2:

Answer the following questions in both relational algebra and SQL. The SQL must match the Relational Algebra. You can only use the operators that we have learned in class.

Assume the following schema:

Classes(class, type, country, numGuns, bore, displacement)

Ships(shipname, class, launched)

Battles(battle, date)

Outcomes(shipname, battle, result)

a) List the ***shipname*** of ships (in Ships) that have not been “sunk” in a Battle.

b) List the ***shipname*** of ships that participated in both battles: “Yellow Sea” and “Tsushima”.

c) List the ***shipname*** of ships that were launched in 1912 or that were sunk in 1912.