

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 discussed in class today.

Assume the following schema:

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

Ships(ship, class, launched)

Battles(battle, date)

Outcomes(ship, battle, result)

a) For every ship in Ships, list how many battles it has participated in.

b) For every battle in Battles, how many more ships survived (result = 'ok') than were sunk (result = 'sunk')?