

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) List the class name and country for all classes with at least 10 guns.

b) List the ships (entire tuples) launched before 1918 (attribute *launched* is a year)

c) List all the ships (entire tuples) that have the same name (attribute *ship*) as their class

d) List the ***ship*** and **class** of ships that were sunk (result = 'sunk')