Assigment#1# (Group Work)

1. Consider the following sets:

$$B = \{1, 2\}, \qquad D = \{a, b\}, \qquad C = B \cup \{a\}.$$

Find the following:

1.
$$\overline{B} =$$

2.
$$\overline{\{a\}} =$$

3.
$$C \cap D =$$

4.
$$C - D =$$

5.
$$P(C) =$$

6.
$$|C| =$$

2. Let R be the set of all real numbers, Q be the set of rational numbers, Q^c be the set of irrational numbers, and N be the set of all natural numbers

Find

•
$$N \cap Q =$$

•
$$N \cup Q =$$

•
$$R - Q^C =$$

•
$$Q^c \cup Q =$$

•
$$Q^c \cap Q =$$