Perform the basic operations between sets (union, intersection, difference, complement, and Cartesian product).

Consider the sets A={2, 4, 6, 8}, B= {1,3,5,6,7,8}, C={0,2,3,4,5,6} and take as a reference set S= {0,1,2,...,9}.

1.1. Fill in the blank with the result of the operation between the given sets.

1.1.1. A - B =

1.1.2. C ∪ B' =

1.1.3. (A ∩ C) - S' =

1.2. Let A={1,2,3,4,5} and B={a, b, c, 2}. Take as universal set S = A ∪ B. Write the sets below by listing their elements.

1.2.1. A – B

1.2.2. (A U B)

1.2.3. (A U B) –(A ∩ B)

1.2.4. (A x B)

1.2.5. (A ∩ B )

1.3. Consider the sets M={a, b, c}, N={a, d}, S={a, b, c, d, e}, where S is the reference set. Write the elements of the set listed below.

1.3.1. M - N=

1.3.2. N' =

1.3.3. N ∪ M' =

1.3.4. (N ∩ M) =