Question:

Consider the set A = {1, 2, 3, 4, 5} and the set B = {2, 3, 5, 7, 11}.

Define the following sets:

$A \cup B$ (the union of sets A and B)

$A \cap B$ (the intersection of sets A and B)

$A \times B$ (the Cartesian product of sets A and B)