

Answer on Question #58728 - Math - Discrete Mathematics

Question

What makes $A = \{1,2,4,5\}$ and $B = \{2,3,6,7\}$ not disjoint?

Solution

In mathematics, two sets are said to be disjoint if they have no element in common.

For example, $\{1, 2, 3\}$ and $\{4, 5, 6\}$ are disjoint sets, while $\{1, 2, 3\}$ and $\{3, 4, 5\}$ are not.

The element 2 is in both sets, because $A \cap B = 2$.

The element 2 makes $A = \{1,2,4,5\}$ and $B = \{2,3,6,7\}$ not disjoint.

Answer: the element 2.