

**Answer to Question #85817 – Math – Algebra
Question**

For any two sets A and B, A intersection B' = A\B
Is the statement true. Justify your answer.

Solution

Yes, this statement is true since

$$\begin{aligned}x \in A \cap B' &\Leftrightarrow x \in A, x \in B' \\ &\Leftrightarrow x \in A, x \notin B \\ &\Leftrightarrow x \in A \setminus B\end{aligned}$$

It was proved that

$$A \cap B' = A \setminus B$$