

Answer on Question #74586 – Math – Discrete Mathematics

Question

Which of the following statement are True?

1. $(A/B) \cup C = A/(B \cap C)$ for any three sets A, B, C .

Solution

This statement is False.

One can take $A = \{1\}, B = \{2\}, C = \{3\}$ then:

$A/B = \{1\}, (A/B) \cup C = \{1,3\}$, and

$B \cap C = \{\}, A/(B \cap C) = \{1\}$, so

$(A/B) \cup C \neq A/(B \cap C)$ for these A, B, C .

Answer: False.