Example 3

Universe of discourse: X = {x1, x2, x3, x4, x5}

Fuzzy subsets:

A = {(x1, 0.1), (x2, 0.3), (x3, 0.8), (x4, 0.6), (x5, 1.0)}

B = {(x1, 0.5), (x2, 1.0), (x3, 0.7), (x4, 0.6), (x5, 0.0)}

C = {(x1, 0.3), (x2, 0.1), (x3, 0.2), (x4, 0.8), (x5, 0.4)}

A ∩ B ∩ C: {(x1, 0.1), (x2, 0.1), (x3, 0.2), (x4, 0.6), (x5, 0.0)}

(A ∪ B)’: {(x1, 0.5), (x2, 0.0), (x3, 0.2), (x4, 0.4), (x5, 0.0)}

A ∩(B ∪ C): {(x1, 0.1), (x2, 0.3), (x3, 0.7), (x4, 0.6), (x5, 0.4)}