

Additional exercises

Exercise 1.

Draw the Venn diagrams for the following pairs of sets; determine the relationship of the pair: i.e. are they equal, is one a subset of the other, are they disjoint, or incomparable (none of the previous relationships).

1. $(A - B) \cup ((B - C) - A)$ and $B \oplus (A \cap C)$
2. $C - (A \cup B)$ and $(A \cap C) \oplus (B \cap C)$

Exercise 2.

Consider the set $V = \{1, \{1\}, \{1, \{1\}\}\}$.

1. Give the Cartesian product $V \times V$.
2. Give $\mathcal{P}(V)$ and $\mathcal{P}(V) \cup V$.

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