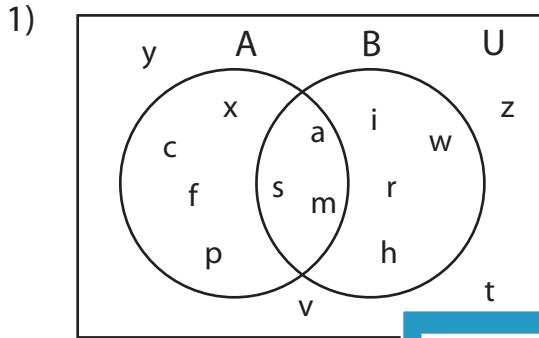


**Venn Diagram**

L3S3

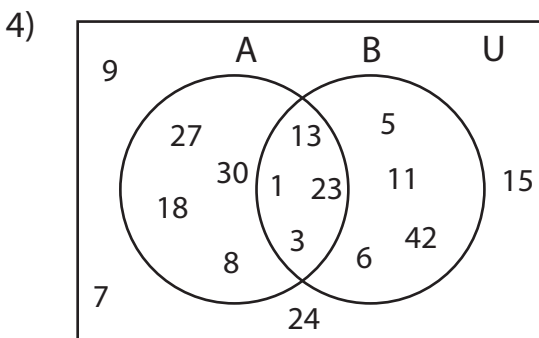
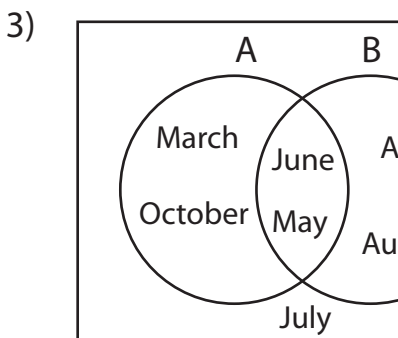
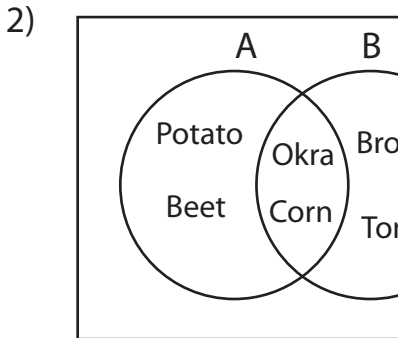
Perform the below mention boolean algebraic operation for the given set of elements.



i)  $(A' \cap B) \cap (B \cup A')$  = \_\_\_\_\_

ii)  $(A - B) \cup (B - A')$  = \_\_\_\_\_

iii)  $(A \cup B) - (B \cap A)$  = \_\_\_\_\_



i)  $(B \cap A)' - (A' \cap B')$  = \_\_\_\_\_

ii)  $(B - A') \cup (A' - B)$  = \_\_\_\_\_

iii)  $(A - B)' \cap (A \cup A')$  = \_\_\_\_\_

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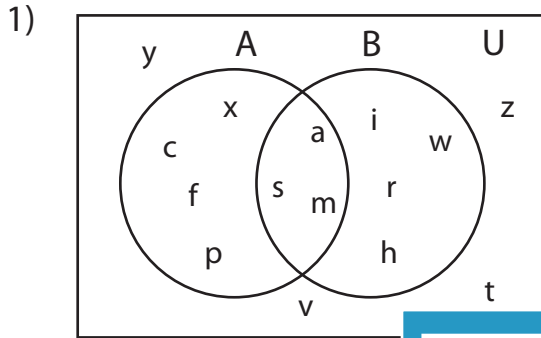
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**Answer key**

**Venn Diagram**

L3S3

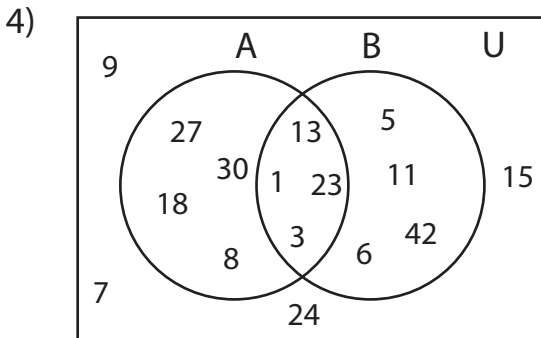
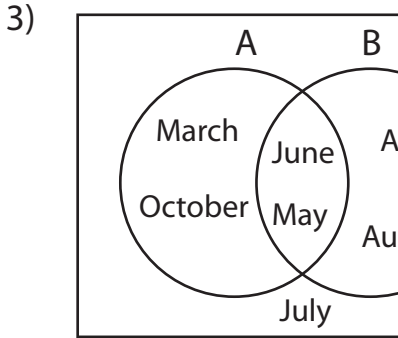
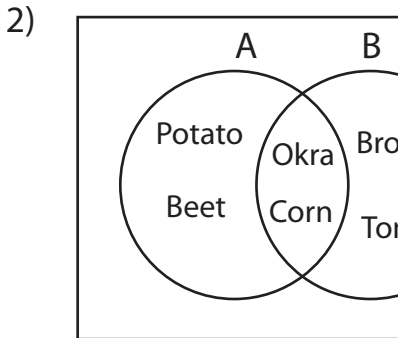
Perform the below mention boolean algebraic operation for the given set of elements.



i)  $(A' \cap B) \cap (B \cup A')$  = **{h, i, r, w}**

ii)  $(A - B) \cup (B - A')$  = **{a, c, f, m, p, s, x}**

iii)  $(A \cup B) - (B \cap A)$  = **{c, f, h, i, p, r, w, x}**



i)  $(B \cap A)' - (A' \cap B')$  = **{5, 6, 8, 11, 18, 27, 30, 42}**

ii)  $(B - A') \cup (A' - B)$  = **{1, 3, 7, 9, 13, 15, 23, 24}**

iii)  $(A - B)' \cap (A \cup A')$  = **{5, 6, 7, 8, 9, 11, 15, 18, 24, 27, 30, 42}**

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**{Okra, Corn}**

**{Broccoli, Tomato, Carrot}**

**{July}**

**{t}**