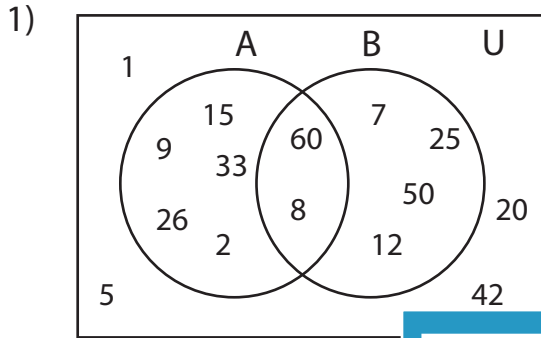


**Venn Diagram**

L3S1

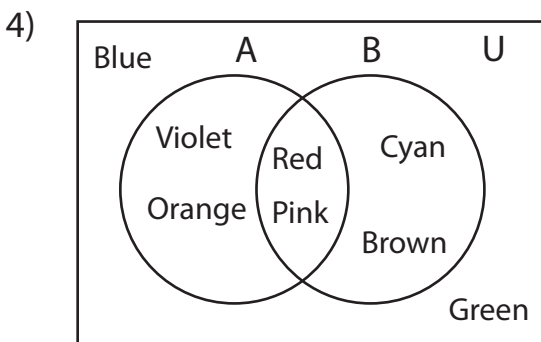
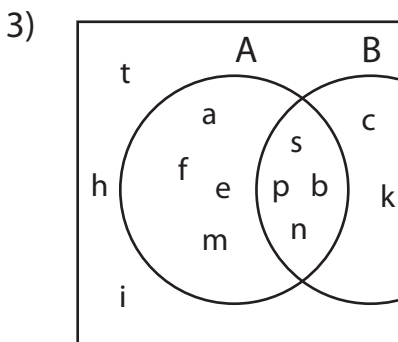
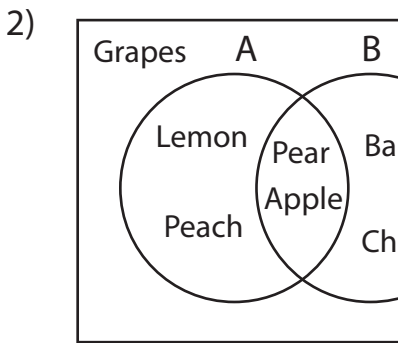
Perform the below mention boolean algebraic operation for the given set of elements.



i)  $A \cup (A - B) =$  \_\_\_\_\_

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

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



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

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

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

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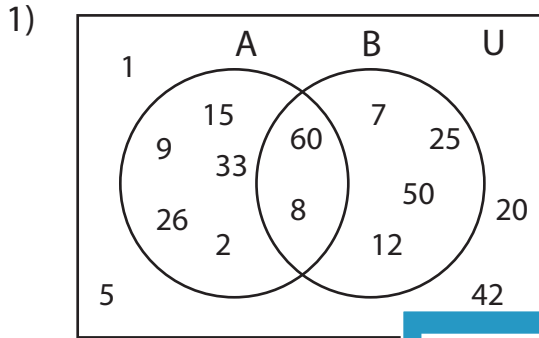
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**Answer key**

**Venn Diagram**

L3S1

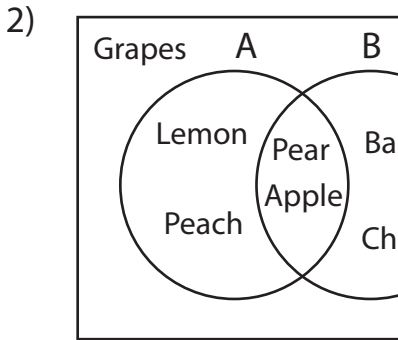
Perform the below mention boolean algebraic operation for the given set of elements.



i)  $A \cup (A - B) = \underline{\{2, 8, 9, 15, 26, 33, 60\}}$

ii)  $(A' - B)' \cup (B' - A) = \underline{\{1, 2, 5, 8, 9, 15, 20, 26, 33, 42, 60\}}$

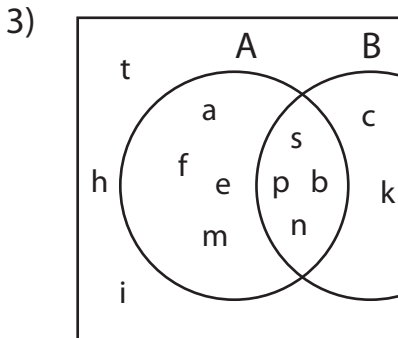
iii)  $(A' - B') - (A \cap B) = \underline{\{7, 12, 25, 50\}}$



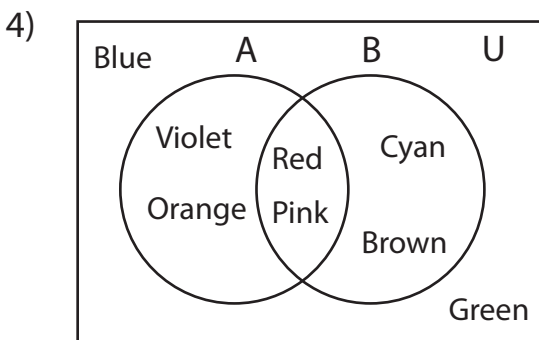
$(A \cap B) = \underline{\{h, Pear, Apple\}}$

$(A \cup B) - (A \cap B) = \underline{\{h, Banana, Cherry\}}$

$(A' - B') - (A \cap B) = \underline{\{on, Peach, Banana, Cherry\}}$



$(A \cap B) = \underline{\{i, k, m, t, u, z\}}$



i)  $(B \cup B') - (A' - B) = \underline{\{Violet, Orange, Red, Pink, Cyan, Brown\}}$

ii)  $(A' - B)' \cap (A - B') = \underline{\{Red, Pink\}}$

iii)  $(A' \cap B) \cup (A \cap B') = \underline{\{Violet, Orange, Cyan, Brown\}}$

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