Sets and Venn Diagrams

A Venn Diagram is a graphical way of showing a relationship between sets.

set U = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12}

set A = {1, 2, 4, 5, 6, 7, 10}
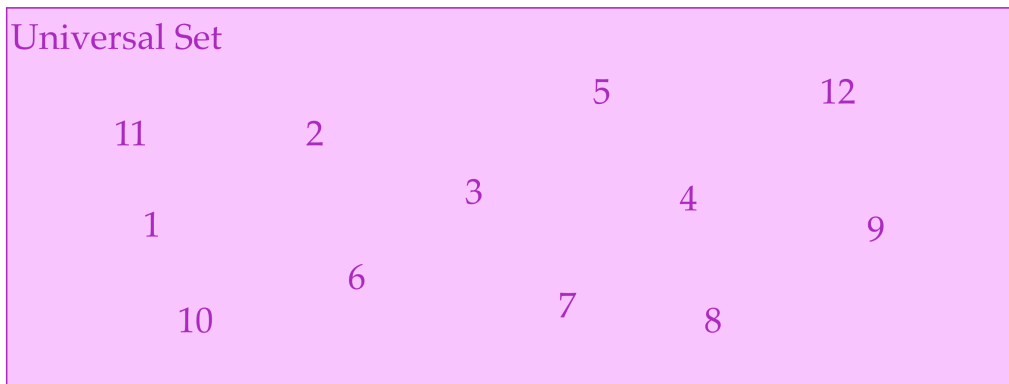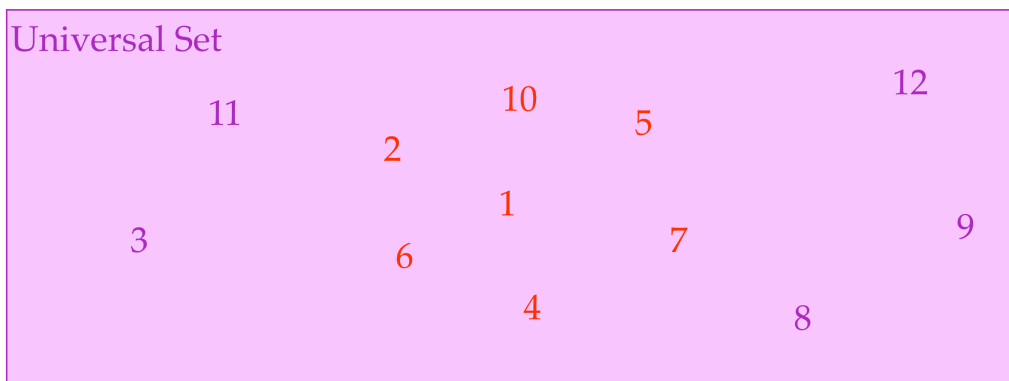
Universal Set

5   12

11   2

3   4

1   9

6

10   7   8

A Venn Diagram is a graphical way of showing a relationship between sets.

set U = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12}

set A = {1, 2, 4, 5, 6, 7, 10}

set A' = {3, 8, 9, 11, 12}
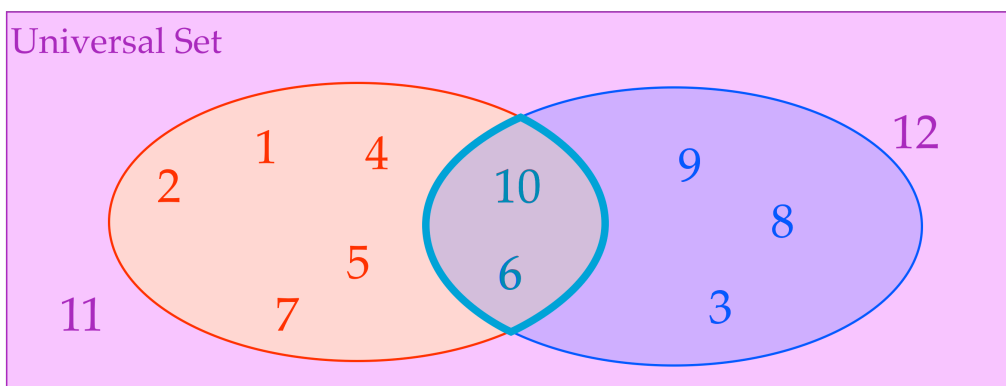
Universal Set

12

11   10   5

2

1

3   7   9

6

4   8

A Venn Diagram is a graphical way of showing a relationship between sets.

set U = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12}

set A = {1, 2, 4, 5, 6, 7, 10}   set B = {3, 6, 8, 9, 10}

Intersection of A and B = $A \cap B$
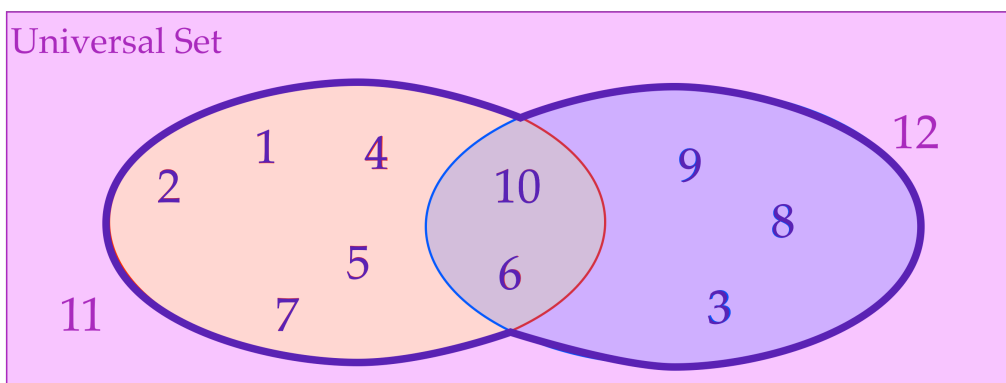

A Venn Diagram is a graphical way of showing a relationship between sets.

set U = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12}

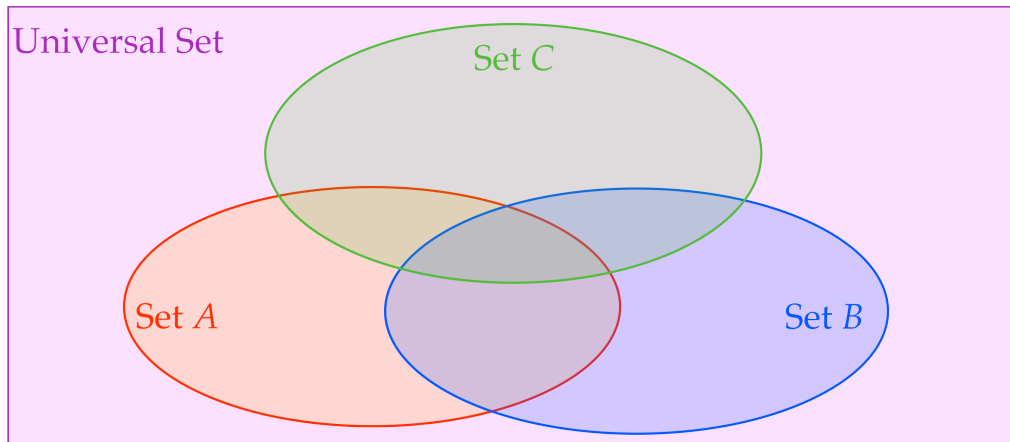set A = {1, 2, 4, 5, 6, 7, 10}   set B = {3, 6, 8, 9, 10}

Union of A and B = $A \cup B$

A Venn Diagram is a graphical way of showing a relationship between sets.

This Venn Diagram illustrated the relationship between A, B and C.
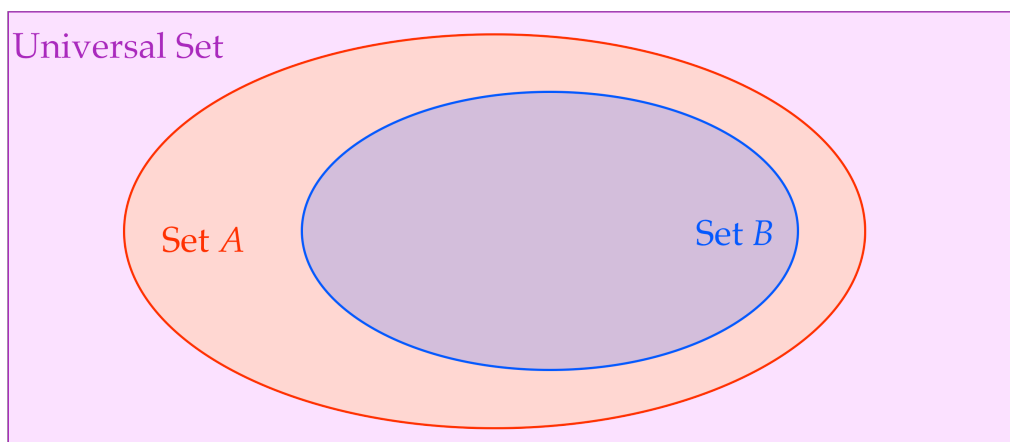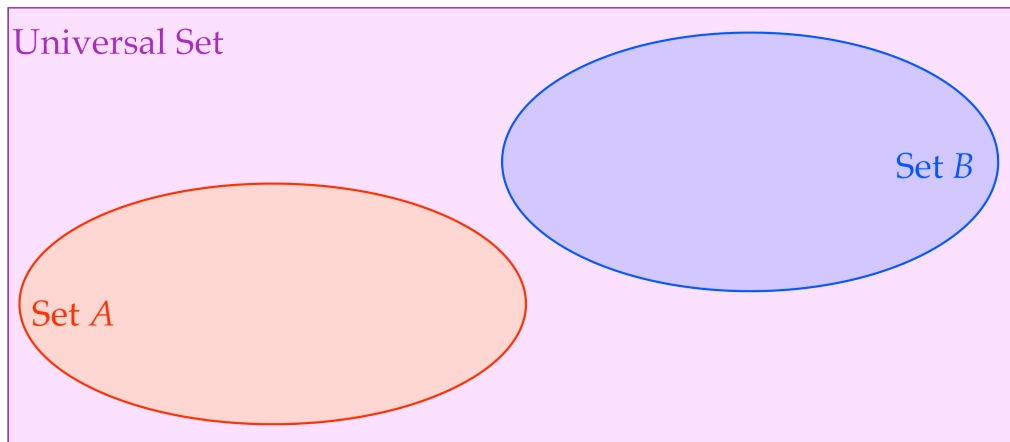
A Venn Diagram is a graphical way of showing a relationship between sets.

This Venn Diagram illustrated the relationship between A and B.

B is a proper subset of A $B \subset A$

A Venn Diagram is a graphical way of showing a relationship between sets.

Universal Set

Set B

Set A

This Venn Diagram illustrated the relationship between A and B.

A and B are considered disjoint sets $\quad A \cap B = \varnothing$